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Supreme Court of the United States

OCTOBER TERM, 1941

No. ~~500~~ 3

UNITED STATES OF AMERICA UPON THE RELATION AND FOR THE USE OF THE TENNESSEE VALLEY AUTHORITY,

Petitioner,

vs.

W. V. N. POWELSON, ASSIGNEE AND SUCCESSOR IN INTEREST OF SOUTHERN STATES POWER COMPANY, A CORPORATION, *et al.*,

Respondent.

On Writ of Certiorari to the United States Circuit Court of Appeals for the Fourth Circuit.

BRIEF FOR RESPONDENT W. V. N. POWELSON, ASSIGNEE AND SUCCESSOR IN INTEREST OF SOUTHERN STATES POWER COMPANY, a Corporation.

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March, 1942.

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BRIEF FOR RESPONDENT W. V. N. POWELSON, ASSIGNEE AND SUCCESSOR IN INTEREST OF SOUTHERN STATES POWER COMPANY, a Corporation.

Opinions Below.

The report of the Commissioners (R. 768-781) is unreported. The opinion of the District Court (R. 1051-1067) is reported in 33 F. Supp. 519. The opinion of the Circuit Court of Appeals (R. 1072-1084) is reported in 118 F. (2d) 79.

Statement of Jurisdiction.

The judgment of the Circuit Court of Appeals was entered on March 10, 1941 (R. 1085). Petition for rehearing was denied on May 10, 1941 (R. 1088). The petition for writ of certiorari was filed on August 9, 1941, and was granted on October 13, 1941 (R. 1099). The jurisdiction of this Court is invoked under Section 240 (a) of the Judicial Code as amended by the Act of February 13, 1925.

Questions Presented.

Respondent submits that the only questions which are properly presented to this Court, are:

(1) Whether, in determining just compensation for the lands condemned, their availability and adaptability for water power purposes should be considered.

(2) Whether the Court below, in entering its award, considered incompetent evidence to the prejudice of Petitioner.

(3) Whether, under Section 25 of the Tennessee Valley Authority Act, the Circuit Court of Appeals, upon hearing the appeal from the statutory three judge District Court, disposed of the same upon the record, without regard to the awards or findings theretofore made by the Commissioners or the District Judges, and fixed the value of the property sought to be condemned in the manner contemplated by the statute.

Statutes Involved.

The relevant portions of the Tennessee Valley Authority Act of 1933, and the Federal Water Power Act, are set out in the Appendix to Petitioner's Brief, at pages 106-112.

Statement of Facts.

Since Petitioner has seen fit to devote a major portion of its brief to argument as to whether the evidence sustains the findings of fact of the three tribunals below, it will be necessary for Respondent*, in replying, to consider the various findings in detail in the main portion of its brief. Reference is here made, however, to some of the more important facts not included in Petitioner's Statement.

On January 28, 1936, when the original petition for condemnation was filed and these proceedings instituted, the Southern States Power Company, together with its wholly owned subsidiary, the Union Power Company, a Georgia corporation, was the owner of approximately 22,000 acres of land on both sides of the Hiwassee and Nottely Rivers. Included in its ownership of these lands were the complete sites for four dams at strategic locations, designated as Powelson, Appalachia, Murphy and Nottely (Comm. Rep., R. 779; Dist. Ct. Jdgmt., R. 1059; Cir. Ct. Op., R. 1074, 5) as well as a very large part of the land required for the Powelson and Appalachia projects and much of the land required for the Murphy and Nottely projects. A glance

* Adopting nomenclature of Petitioner's Brief Mr. Powelson and Southern States Power Company will be referred to interchangeably as "Respondent".

at the red and brown portions of Respondent's Exhibit No. 8 (Rep. Charts Tab. 1, offered R. 37) reveals the scope of Respondent's acquisition of lands.

After many years of research, exploration, surveying and study, Respondent had finally adopted a plan of integrated hydroelectric development of the Hiwassee and Nottely Rivers, calling for dams at each of these dam sites (Res. Ex. 17, Rep. Charts, Tab. 2, offered Comm., Tr. 156). Although Petitioner characterizes this as an "imaginary" four-dam project (Pet. Br. 7), the fact of the matter is Respondent and his predecessors spent many years in buying up lands for this purpose, determining the proper locations for dams, causing these dam sites, and the lands which would be flooded, to be surveyed and staked out, establishing contour lines, preparing maps, formally adopting plans for the development of the sites by proper corporate action, and filing the maps in the public offices as required by law.

As a result of these activities and exhaustive engineering studies, which Petitioner blithely characterizes as "obsolete", Mr. Powelson * learned that the Coleman site for a dam discovered by army engineers was not as advantageous as the Powelson site five miles farther down the river, where the present Hiwassee Dam stands. These "obsolete" engineering studies thus enabled Mr. Powelson to advise Mr. Bock, one of the TVA engineers, that they

* Mr. Powelson is an eminent hydro-electric engineer. He graduated first in his class at the United States Naval Academy at Annapolis, and was sent by the Government to the University of Glasgow to do post-graduate work in Electricity and Naval Architecture, again winning first honors. As a result of wounds received in the Spanish-American War, he was permanently disabled and retired after the War. (He served in the World War as Inspector General of Naval Overseas Transportation). After his retirement he engaged in engineering work, which included extensive experience in the designing and construction of all kinds of hydro-electric projects. It was his work on the dam on the Nolichucky River in Tennessee that led to his becoming interested in the Carolina-Tennessee Power Company (R. 25-26, 68-69).

were making a mistake in prospecting for a dam at Coleman, since the Powelson site, although not noted in the army engineers' report, was far superior. Within five months thereafter the TVA abandoned its drilling at the Coleman site and began its work at the Powelson site, where it eventually constructed the Hiwassee Dam (R. pp. 64, 65). For purposes both of flood control and of power development the Powelson (Hiwassee) dam site, selected as a result of Respondent's "obsolete" engineering studies, is immeasurably superior to the site first prospected by TVA engineers at Coleman, permitting the erection of a higher dam and the creation of a larger storage reservoir.

Through 1935 Respondent actually invested in this "imaginary" enterprise, as Petitioner at studied intervals throughout its brief terms it, the sum of $1,061,942.53 (Res. Ex. 187, offered Comm. Tr. 731) of which Mr. Powelson personally contributed $586,196.21 (R. 185). This money was used for buying lands, surveying, engineering, taxes, acquisition costs, legal expenses, etc. but not a penny of it was paid as compensation for the owners or officers by way of salaries, dividends, or otherwise. Though Mr. Powelson, an eminent engineer has devoted many years of his life to the service of the enterprise and had invested over half a million dollars of his personal funds therein, he has not received as much as a dollar by way of compensation (R. 161).

In defending its rights in this "imaginary" development, Respondent was involved in protracted and bitter litigation with the Hiwassee River Power Company for over ten years, during which the matter was four times before the Supreme Court of North Carolina and twice before

this Court.* Petitioner admits that one of the issues raised in this litigation was which of these two power companies had by surveying the ground, staking it out, and adopting locations, acquired the prior right to develop this portion of the Hiwassee River (Comm. Tr. 505).

Respondent had hoped that after full consideration of the facts of the case by three successive tribunals, Petitioner would not seek to raise again for the fourth time pure questions of fact, especially when limited resources are pitted against the unlimited wealth of sovereign power.

Petitioner's presentation of the facts is colored, as reiteration throughout its brief discloses, by its notion that notwithstanding the investments, the engineering research and the corporate action above mentioned Respondent's project is "imaginary". But the plain fact, as evidenced by the findings of three successive tribunals, is that the location and physical aspects of Respondent's property made it one of the most outstanding and best of the undeveloped water power properties in the South. The four dams, if erected as planned by Respondent, would have created a total storage capacity of 81,650,000,000 cubic feet of water (Res. Ex. 17, Rep. Charts Tab. 2, offered Comm. Tr. 156; R. 94). The capacity of each of the reservoirs would have been as follows:

Murphy	39,250,000,000	cub. ft. of water
Nottely	22,290,000,000	" " " "
Powelson	17,250,000,000	" " " "
Appalachia	2,860,000,000	" " " "

* *Carolina-Tennessee Power Co.* v. *Hiawassee River Power Co.*, 171 N. C. 248 (1916); 175 N. C. 668 (1918); 186 N. C. 179 (1923); 188 N. C. 128 (1924).
Hiawassee River Power Co. v. *Carolina-Tennessee Power Co.*, 252 U. S. 341 (1920); 267 U. S. 586 (1925).

These reservoirs* would have had a tremendous drainage area, totalling more than a thousand square miles, (Res. Ex. 280, Rep. Charts Tab. 25, offered R. 200) in the territory of the highest rainfall in the United States with the single exception of the territory along the State of Oregon-Washington line between the sea and the Cascade Mountains (Res. Ex. 208, offered R. 91).

Moreover, the property lends itself readily to the development of great hydraulic heads, because the fall in the Hiwassee River in this particular section is unusually great. In the short space of 46 miles from the upper end of the Murphy Reservoir to the dam site at Appalachia the fall of the river is 555 feet (Res. Ex. 17, Rep. Charts, Tab. 2, offered Comm. Tr. 156) as compared with a fall of 378 feet in the Tennessee River between the lower end of Gilbertsville Dam and the upper end of Chickamauga Dam over a distance of 490 miles; in other words, a fall of 12½ feet per mile as compared with a fall of 9 inches per mile, *i. e.* a fall *sixteen times greater*. The fall from the upper end of Murphy reservoir to the bottom of the Gorge below Appalachia is 970 feet in a distance of 63½ miles (R. 73), a fall of 15.3 feet per mile, and *twenty times greater*. The fall of this River was conservatively described by the District Court in its finding as "decidedly greater than that of the average stream used to generate hydroelectric power" (R. 1055).

Finally, by reason of the records of Government gages on the Hiwassee River since 1898 and those on the Tennessee River since 1874, which could be correlated, very

* TVA has completed its Hiwasse Dam and power plant on Respondent's site at Powelson. It has substantially completed its dam at Nottely. Its dam at Appalachia has been under construction for nine months.

comprehensive stream flow records were available (R. 137-139).

From all of this data, the potential water power of the four dam project could be scientifically computed with a high degree of accuracy. Indeed, two of the Government's expert witnesses frankly admitted that upon this point there could be no dispute. They stated:

> "Now, the difference between Mr. Powelson's conclusions and our conclusions is the difference in the efficiency that we figured on as against the efficiency that he figures on, but on the basic starting point, we are together" (Dr. Waddell, R. 761).
>
> "Briefly the result of that computation is that the theoretical power of the river is substantially as testified in this case" (Ayres, R. 582).

One of the chief disputes of the many experts in this case revolved about the percentage of efficiency that machinery could achieve in converting this undisputed potential energy into actual energy. The other principal issues of fact were the cost of constructing the project, the fixed annual charges, and the market for power. On each of these factual questions voluminous evidence was introduced by each side in the greatest detail. Three tribunals (the Commissioners, the District Court, and the Circuit Court of Appeals—nine judges in all) considered all of the evidence upon these points carefully, and unanimously concluded that the property had value for water power purposes. The Circuit Court of Appeals held:

> "The evidence established beyond question, we think, that considering the ever-increasing demand for electric power the property did have value for

water power purposes; and this was the concurrent finding of the commissioners and the court below" (R. 1076).

Petitioner also states that over its objection evidence was introduced as to the prices paid for other lands required for the Hiwassee project (Pet. Br. 12) and refers to the Record to sustain its position. An examination of the portions cited clearly indicates that, although the Commission originally evinced an interest in such prices, it at no time insisted upon their production, and when a list was actually produced in court, indicated that the Government could withhold it without prejudice:—

> "Chairman Mull: The situation is now before the petitioner. We will let you pass on it, whether you want to introduce it or whether you do not, without prejudice.
>
> "Mr. Fowler: We are perfectly willing to put it in * * *" (R. 640).

Not merely was Petitioner not forced to put a list in evidence, but what it proceeded to place on the Record was a list *not of prices* but of its own *appraisals of market value* of such other lands to be acquired by Petitioner (See Pet. Ex. 3-L, entitled "Hiwassee Reservoir, *Appraised Value By Tracts,*" * R. 796; and testimony of Petitioner's witness Snyder, R. 642).

Petitioner states, moreover, that some of the necessary land for the project could not have been acquired by Respondent under its power of eminent domain (a power Petitioner admits Respondent had) (Pet. Cert. 22, Note 12), because some of it was owned by the United States, some

* All italics for emphasis ours unless otherwise noted.

by the State of North Carolina, and some already devoted to public uses (Pet. Br. 9). Respondent contends there is nothing in the record to show that the State of North Carolina had any interest in the lands condemned herein, or that the United States had any such interest except as trustee for the Eastern Band of Cherokee Indians; and as to the Indian lands and lands already devoted to public uses, respondent introduced substantial evidence more than satisfying his burden of showing that such tracts could have been acquired or their use dispensed with.*

Petitioner states further that the operation of any private dams at Respondent's sites would have a substantial adverse effect on navigation in the lower portion of the river (Pet. Br. 5). It does not note, however, that an examination of the Record discloses that an operation of Respondent's development in such a manner as not to adversely affect navigation on the Hiwassee River was entirely feasible and, indeed, its operation as contemplated would have improved conditions for navigation on the river (R. 753-758; Res. Ex. 404, Offered Comm. Tr. 5592). In fact, the Federal Power Commission itself, as Petitioner pointed out in its Petition for Certiorari (Pet. p. 16 Note 9), stated that a proposed hydro-electric development on the Hiwassee River above the Town of Murphy "might be a serious detriment to navigation *or materially improve it below*". In the same statement the Agency adds, "A license, if issued, would contain such conditions as deemed necessary to protect navigation. *It is not believed these would add any serious burden to the operation of a power project*" (R. 311). The only witness offered by Petitioner on this question admitted that one form of operation pos-

* See *infra*, pages 68 to 72.

sible to Respondent "would have no adverse effect" on navigation below (R. 560). The concurrent finding of the three tribunals below that Respondent had a valuable water power project is, of necessity, a finding that that project had such water power value under proposed operations which would not have an adverse effect on navigation.

The taking by Petitioner of the Powelson dam site and the holdings of Respondent in the basin thereof, as well as the Murphy dam site and part of the Appalachian reservoir, has deprived Respondent not only of the use of the property taken, but all of the property which it has acquired for its integrated hydroelectric development. That which remains in his hands no longer has any water power value, and, accordingly, the taking by Petitioner has deprived Respondent of all the water power value of all of his lands acquired for his development. The three tribunals below after carefully considering all the evidence have unanimously found this to be a fact (R. 780, 1060, 1080).

For the fourth time, despite a contrary finding in the three tribunals below, Petitioner again makes the claim that there was no reasonable probability that Respondent would be able to acquire the remaining lands necessary for this development. Again Petitioner strongly emphasizes alleged substantial defects in the title to the tracts of which Respondent claimed ownership (Pet. Br. 8). This, despite the fact that the special master appointed by the District Court to consider such claims filed his report* on December 24, 1941, adjudging that the value of such claims totaled $3,696.07.† The lack of "seriousness" of such alleged de-

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*By stipulation a certified copy of the Special Master's report has been filed with the Clerk of this Court. By the same stipulation either party is permitted to refer to said report.

†In two tracts valued at $1,558.00 there is a possible outstanding contingent interest not included in the above figure.

fects in title is clearly demonstrated when this figure is compared with the total award for lands taken ($976,289.40), less than 4/10ths of 1 per cent thereof.

Finally, the Court's attention should be drawn to the fact that Respondent's hydroelectric development had an unusual characteristic which gave it further value, namely, its adaptability to the production of super primary power.* The seller and consumer of power must have a dependable supply on hand at all times, *i. e.*, continuous primary power. At the same time many sellers, by reason of the fact that they do not have large water storage capacities in their reservoirs or that they have run-of-the-river plants† without substantial water storage, have available during certain seasons non-dependable power known as secondary, surplus or dump power. This kind of power commands in the market only the price of a by-product. But when this non-

---

* There was introduced before the District Court as Ct. Exh. 21, a set of definitions of technical terms used in the course of the trial from which we quote:

> "*Primary power*" is an electric *service* contracted to be rendered by delivering dependable energy from hour to hour and from day to day at the rates of supply and in the quantities necessary to meet the contract requirements of the customer, but with the distinguishing characteristic that the weekly or monthly deliveries of energy shall not be subject to substantially greater variations than the variations in the total regular electrical requirements of the customer.
>
> "*Super primary power*" is an electrical *service* contracted to be rendered by delivering dependable energy from hour to hour and from day to day at rates of supply and in quantities necessary to meet the contract requirements of the customer, but with the distinguishing characteristic that the customer may take the greatest deliveries of dependable energy at the time when his own capacity to generate energy is weakest and may take the smallest deliveries of dependable energy at the time when his own capacity to generate energy is the strongest.
>
> "*Load factor*". This term is descriptive of the character of an electric *service* rendered. It is always stated as a percentage. It is the average electrical demand used during a stated period of time as a percentage of the maximum of electrical demand used during that period while rendering an electrical service.

† Hydro plants depending upon the flow of the river alone for the production of power. Their output, of course, varies as the flow of the river varies.

dependable power can be combined with an adequate supply of Saluda type super primary power resulting in a power supply as dependable primary power equal to the sum of the combined non-dependable and the super primary electrical energy, then the whole power supply becomes dependable primary power and commands the market price of such power.

The service of converting this cheap by-product electrical power into the much more valuable dependable primary power, for which there is an enormous and rapidly growing demand, is a service of exceptional value measured by the yardstick of the difference in market price of dependable primary power and non-dependable secondary power. This service is performed by the supply of Saluda type super primary power which obviously must have a greater market value than dependable primary power. By reason of the tremendous storage capacity of the four proposed reservoirs, Respondent's project could produce large quantities of power which it could deliver as needed throughout the year to other companies at a higher price than ordinary primary power. Because it was capable of producing such super primary power, Respondent's project was much more valuable (R. 1074).

Summary of Argument.

I.

Respondent is entitled to compensation for the water power value of his property. Under the law of North Carolina prior to its admission to the Union, water power in non-navigable streams, as here, was subject to private

ownership. The Constitution conferred power on the Government over navigable streams by its grant of power to regulate interstate commerce. The Constitution did not confer such power on the Government with respect to non-navigable streams, but the law of each of the States governs property rights in non-navigable streams within its borders. Numerous decisions have recognized such property rights under the Constitution and none to the contrary are to be found. Respondent has acquired a valuable property right in the water power of its lands under the laws of North Carolina. The Government has unquestioned authority to prevent the operation of projects on non-navigable streams that would have a substantial adverse effect on navigation below. Petitioner now seeks to appropriate arbitrarily Respondent's property rights, recognized by North Carolina, in non-navigable streams without giving compensation therefor.

II.

Many of the questions raised in Petitioner's brief are purely factual. Whether or not the lands to be used in Respondent's development had water power value is merely a question of fact as are such questions as, the amount of power that could be produced; the cost of dams; the efficiencies of turbines and water wheels; the annual fixed charges; and the market for power. The findings of three tribunals below on these and other questions of fact are supported by substantial evidence and should therefore be accepted here as conclusive.

III.

The three tribunals below properly found that the lands of Respondent have water power value. The gross potential energy available, the amount of stream flow, and the hydraulic heads were demonstrated beyond dispute. Respondent proved by substantial evidence that a four dam project could be erected at his development at reasonable cost; that it could produce each year 587,000,000 kwh. of primary power or 512,500,000 kwh. of super primary power, and could supply a firm demand capacity of 167,200 K. W. corresponding to an annual load factor of 35%; that a market for the power was available; and that the obtainable selling price made the project commercially attractive.

IV.

There was a reasonable probability that Respondent's land would be commercially developed for water power purposes within the reasonably near future. Although Respondent has been engaged in the development of this project for many years, it had not started actual construction because of a variety of factors; because, among other things, it was involved in long and bitter litigation over its water power rights in the development for more than ten years. At all times, however, the development was being advanced in one way or another, such as the purchase of lands, the making of extensive surveys, the staking out of reservoirs, and the making of exhaustive engineering studies. At the time of the institution of these proceedings a definite power shortage was indicated and the money market was such that actual construction would have been begun within the reasonably near future.

Respondent had acquired some 22,000 acres of the necessary lands, including the four strategic dam sites, and could have acquired any remaining necessary lands by the exercise of its power of eminent domain. The evidence showed that lands not subject to eminent domain could have been acquired by voluntary purchase or their use dispensed with.

V.

There is legally sufficient evidence to support the award made by the court below. Respondent offered evidence of its plans for the development merely to afford a basis upon which the water power value could be considered in arriving at the fair market value of the land taken. The testimony of expert witnesses as to the value of Respondent's lands supports the award made by the Court. Evidence of possible profits was offered not as a basis upon which damages could be allowed, but merely as a factor in demonstrating the existence of water power value. Evidence offered by Petitioner as to prices paid by it for other lands or appraisals thereof was properly before the court below for consideration. Since Petitioner offered this evidence willingly it cannot object to its consideration now. It was proper for the court below to consider the possibility of combining lands through the use of the power of eminent domain under the law of North Carolina.

VI.

The award of severance damages was proper. Respondent proved that its lands had water power value as an integrated hydroelectric project, and that the taking by the

Government destroyed that value. Accordingly, just compensation must be paid not only for lands taken but for damages caused to the remainder by the taking.

The award for damages to lands held in the name of the Union Power Company was proper, since that Company was a wholly owned subsidiary of Respondent, which had been formed for the purpose of acquiring lands for that part of the development that was within the State of Georgia. Furthermore, the Union Power Company was made a party to the action and is bound by the award made.

VII.

The court below awarded interest upon the theory that the initial taking by Petitioner destroyed Respondent's integrated hydroelectric project. Since the findings of the courts below are sustained by substantial evidence showing that Respondent's lands had water power value as an integrated hydroelectric development, the award of interest was proper.

VIII.

The Circuit Court of Appeals correctly conceived the scope of review under Section 25 of the Tennessee Valley Authority Act. The court below did not regard itself as bound by the findings of the trial court, but considered them in the light of the record and found the true value of the property independently. There is no conflict of authority on this point between the Circuit Court of Appeals for the Fifth Circuit and the court below.

ARGUMENT.

I.

Respondent is entitled to compensation for the water power value of his property.

Petitioner argues (Br. Point I., pp. 27 *et seq.*) that since this Court has determined that the water power in a navigable stream may be taken by the government without compensation, this Court should now extend the doctrine to water power in a non-navigable stream and hold that it may be taken by the government from the state or its grantee without compensation.

The precedent-smashing nature of this contention necessitates a review of the basic decisions of this Court setting forth the fundamental principles of the jurisdiction of the United States and of the several states over navigable and non-navigable waters.

A.

The State of North Carolina has sole jurisdiction to prescribe such rules of real property law as it deems expedient with respect to non-navigable streams within its borders.

British, Colonial, and Early State Law.

A complete understanding of the law of the State of North Carolina as to water rights requires a knowledge of the law of the colony that preceded it. The law of the colony of North Carolina, in turn, had its origin in the common law of England. At common law the title to tidewaters,

and to lands flooded by the tide, was held by the king as sovereign for the benefit of his subjects. Although the sovereign held the title to tidewaters in trust, his rights as titleholder were subject to the rights of the people to pass over the waters and to fish therein. The common law, however, also recognized that a private person might become the sole owner of an inland river or that part of any river above the flow of the tide and all the rights therein. The owners of the banks were held to be the owners of all fresh waters above the ebb and flow of the tide, *even if actually navigable,* to the thread of the stream; this was the law in Ireland and Scotland as well.

Upon the settlement of the colonies the grantees were vested with the same rights as the King had. Rights as to tidewaters were held in trust for the benefit of all the colonists. At the time of the American Revolution, these rights in tidewaters, impressed with the same trust, were vested in the thirteen original states. Thus, at the time of the formation of the Union, each of the original states as an incident to its sovereignty had jurisdiction over all the lands and waters within its borders (subject, of course, to any prior grants), holding its rights in tidewaters and lands below high water mark in trust for the public, but treating all other water rights as ordinary property rights governed by common-law principles of ownership.

At an early time the great differences in the geography of this continent with its important navigable inland waterways, as compared with the relative unimportance of inland waters in England, created a confusion in the law. Several states, among them North Carolina, recognized that the public policy underlying the trust theory of property rights

in tidewaters in England was equally applicable to all navigable waters and rejected the theory that navigable waters not subject to the tide should be capable of private ownership. Accordingly, in the exercise of their sovereign power, they held that not only tidewaters, but all waters navigable in fact and the lands submerged thereby, were held by the state in trust for the benefit of all its citizens. *Hatfield* v. *Grimstead*, 29 N. C. 139 (1846); *Lewis* v. *Keeling*, 46 N. C. 299, 306 (1854). The common-law principles of property rights as to waters non-navigable in fact, however, continued in force in North Carolina and elsewhere.

An exhaustive historical survey of all of those principles is set forth in Justice Gray's opinion in *Shively* v. *Bowlby*, 152 U. S. 1 (1894). Authority to the same effect is ample. *Barney* v. *Keokuk*, 94 U. S. 324 (1877); *Borax Consolidated Ltd.* v. *Los Angeles*, 296 U. S. 10 (1935); *Appleby* v. *City of New York*, 271 U. S. 364 (1926); *Hardin* v. *Jordan*, 140 U. S. 371 (1891); *McCready* v. *Virginia*, 94 U. S. 391 (1877); *Oklahoma* v. *Texas*, 258 U. S. 574 (1922); *Port of Seattle* v. *Oregon & Washington Railroad Company*, 255 U. S. 56 (1921); *St. Anthony Falls Water Power Company* v. *St. Paul Water Commissioners*, 168 U. S. 349 (1897); *United States* v. *Cress*, 243 U. S. 316 (1917); *United States* v. *Oregon*, 295 U. S. 1 (1935).

The Law Under the Federal Constitution.

The only jurisdiction the United States might have in a case such as this would arise by implication out of the Commerce Clause of the Constitution. "The Congress shall have power * * * to regulate commerce * * * among the several states" *Gibbons* v. *Ogden*, 9 Wheat 1 (1824);

Leovy v. *United States*, 177 U. S. 621 (1900); *United States* v. *Appalachian Electric Power Co.*, 311 U. S. 377, 404 (1940). The power of the federal government over navigable streams arises from the fact that they are highways of interstate commerce.

This power is not as absolute, however, as Petitioner suggests, even in the case of navigable streams. In the first place, it has become a well established principle of property law, that title to navigable waters, the river beds, and submerged lands in navigable streams is *not* in the United States, but in the several states themselves, except where it may have been vested elsewhere by state law. (See cases collected *supra*, p. 20). Thus Mr. Justice Brandeis in *Port of Seattle* v. *Oregon and Washington Railroad Company*, 255 U. S. 56 (1921) held (at p. 63):

> "The right of the United States in the navigable waters within the several states is limited to the control thereof for purposes of navigation. Subject to that right Washington became, upon its organization as a state, the owner of the navigable waters within its boundaries and of the land under the same. *Weber* v. *Board of Harbor Commissioners*, 18 Wall. 57. By § 1 of Article XVII of its constitution the State asserted its ownership in the bed and shore 'up to and including the line of ordinary high tide in waters where the tide ebbs and flows.' The extent of the State's ownership of the land is more accurately defined by the decisions of the highest court, as being the land below highwater mark or the meander line, whichever of these lines is the lower. The character of the State's ownership in the land and in the waters is the full proprietary right. *The State, being the absolute owner of the tide lands and of the waters over them, is free in conveying tide lands either to*

grant with them rights in the adjoining water area or to completely withhold all such rights. Whether a conveyance made by the State of land abutting upon navigable water does confer upon the grantee any right or interest in those waters or in the land under the same, is a matter wholly of local law. Shively v. *Bowlby*, 152 U. S. 1. *Upon such questions the provisions of the constitution and statutes of the State and the decisions of its highest court, are accepted by us as conclusive. St. Anthony Falls Water Power Co.* v. *St. Paul Water Commissioners*, 168 U. S. 349."

Secondly, even the federal power of control of navigable streams for purposes of the regulation of commerce is itself subject further to the limitations of the Fifth Amendment. The fact that the Government is undertaking to regulate or improve navigation pursuant to its constitutional power does not relieve it from the restraint of the Fifth Amendment as far as private property is concerned. Where private property is taken, compensation must be paid. *United States* v. *Cress*, 243 U. S. 316 (1917); *Monongahela Navigation Company* v. *United States*, 148 U. S. 312 (1893); *United States* v. *River Rouge Improvement Company*, 269 U. S. 411 (1926); *United States* v. *Lynah*, 188 U. S. 445 (1903).

But Petitioner, disregarding these principles, not only argues that federal control over navigable streams is plenary, but that the same plenary powers extend to the non-navigable tributaries of navigable streams (Pet. Br. 30). It bases this argument largely on the decision of this Court in *United States* v. *Rio Grande Dam and Irrigation Company*, 174 U. S. 690 (1899), where it was held that the Government could enjoin the construction of a dam on

a non-navigable stream *if its use would have a substantial adverse effect upon navigation in the river below.* This argument demonstrates that Petitioner entirely ignores the plain distinction made in that very case between the jurisdiction of Congress over navigable waters, and its right to protect that jurisdiction by preventing acts elsewhere which would substantially effect navigation. Congress has the power to make the erection or maintenance of any structure in a *navigable* stream without a federal license *ipso facto* unlawful regardless of its actual effect or lack of effect on navigation, *Greenleaf Johnson Lumber Company* v. *Garrison, Secretary of War*, 237 U. S. 251 (1915); *United States* v. *Chandler-Dunbar Water Power Company*, 229 U. S. 53 (1913), but this is clearly not so in the case of a non-navigable stream, as the *Rio Grande* case clearly demonstrates. There the Court held (174 U. S. 709):

> "The creation of any such obstruction may be enjoined, according to the last provision of the section, by proper proceedings in equity under the direction of the Attorney General of the United States, and it was in pursuance of this clause that these proceedings were commenced. *Of course, when such proceedings are instituted it becomes a question of fact whether the act sought to be enjoined is one which fairly and directly tends to obstruct (that is, interfere with or diminish) the navigable capacity of a stream. It does not follow that the courts would be justified in sustaining any proceeding by the Attorney General to restrain any appropriation of the upper waters of a navigable stream. The question is always one of fact, whether such appropriation substantially interferes with the navigable capacity within the limits where navigation is a recognized fact.*"

Significantly, the Court did not grant the injunction prayed for, but merely ordered an inquiry to determine (174 U. S. 710):

> "• • • whether the intended acts of the defendants in the construction of a dam and in appropriating the water of the Rio Grande will substantially diminish the navigability of that stream within the limits of present navigability, and *if so*, to enter a decree restraining those acts *to the extent that they will so diminish*."

Thus this case cannot be relied upon to show any such absolute power over non-navigable tributaries as Petitioner claims to exist, but on the contrary it is manifest that this case holds that the Government's jurisdiction as to non-navigable tributaries only arises to prevent acts which would adversely affect navigation below.

In any event the case can have no applicability here by reason of the factual situation. As will be demonstrated later (*infra*, pp 60-68), Respondent's witnesses established by competent testimony, and to the complete satisfaction of three tribunals below, that its proposed development would not adversely affect navigation, but on the contrary would improve it (R. 757). Moreover, the only witness offered by Petitioner on this point was forced to agree that at least one plan of operation proposed by Respondent would have no substantial adverse effect on navigation (R. 560).

Petitioner, having started with this false premise as to the nature of the control over non-navigable streams, proceeds with the formation of its syllogism by contending that the recent decisions of this Court in *United States* v. *Appalachian Electric Power Co.*, 311 U. S. 377 (1940), and

United States v. *Chandler-Dunbar Water Power Company*, 229 U. S. 53 (1913), not only establish that the flow of a navigable stream is in no sense private property, but that these decisions furnish a base to justify this Court in holding that the same rule should be extended to non-navigable streams. The "historic head of navigation", says Petitioner, is an *"artificial line"* (Br. 37), the location of a man's property on the navigable or non-navigable portion of a stream is *"fortuitous"* (Br. 38), and the distinction between navigable and non-navigable in this connection is *"narrow"* (Br. 41) and should be disregarded! The line separating a man's farm from a government encampment might likewise be termed "narrow", "artificial", and even "fortuitous", but nevertheless that line cannot be lightly ignored. Petitioner apparently is disposed to consider the problem as one newly presented which should be decided without regard to precedent. It completely ignores that we are dealing with a question of property law, which as our historical analysis has shown, has been established literally for centuries. The historic head of navigation is as much a monument of title, as any stone marker placed by a surveyor. Above that monument persons have acquired property rights in the flow of the stream under state law. Below that monument individuals cannot acquire such rights.

An excellent statement of the common law of real property with reference to riparian rights is found in *Swain* v. *Pemigewasset Power Co.*, 76 N. H. 498 (1912) where the court held (76 N. H. 499):

> "The rights of riparian owners at common law to a beneficial use of the water of the river or stream, passing through or adjacent to their lands, are not open to serious doubt. They are entitled to a rea-

sonable usufruct of the water, or of the power it is capable of developing in consequence of the natural configuration of the bed of the stream opposite their respective lands. *If at that place there is such a fall in the flow of the stream that it is capable of being utilized for the development of mechanical power by the erection of a dam and the usual appliances used in connection therewith, the riparian owner has a valuable interest in that natural condition of the stream, which is incident to his ownership of the land, extending ordinarily to the thread of the stream.*

"* * * *The capacity of the land, in connection with a reasonable use of the water flowing over it, to generate power upon his premises, was deemed to constitute a valuable right, which he could not be wrongfully deprived of without suffering substantial damage, for the recovery of which an action would lie against the wrongdoer.*"

The law is well summarized in *Gould on Waters* (1900, 3rd ed.) sec. 46, p. 106, as follows:

"Fresh-water streams which are not a common passage are private property, and the title to the bed of the river *ad filum aquae* is in the riparian proprietors in severalty and not in common, whether their tenure is freehold, copyhold, or leasehold. They own the islands which form in the stream, possess the exclusive right of fishing and fowling, and may grant and convey the bed of the stream separate from the dry land which bounds it. *If the banks on both sides of the river belong to the same person, he owns the entire river-bed according to the extent of his lands in length.*"

These rules of property law have the express approval of this Court; see *United States* v. *Rio Grande Dam and Irrigation Company*, 174 U. S. 690 (1899) at page 702:

> "The unquestioned rule of the common law was that *every riparian owner was entitled to the continued natural flow* of the stream. It is enough, without other citations or quotations, to quote the language of Chancellor Kent, 3 Kent Com. § 439:
>
> " 'Every proprietor of lands on the banks of a river has naturally an equal right to the use of the water which flows in the stream adjacent to his lands, as it was wont to run *(currere solebat)* without diminution or alteration. No proprietor has a right to use the water, to the prejudice of other proprietors, above or below him, unless he has a prior right to divert it, or a title to some exclusive enjoyment. *He has no property in the water itself, but a simple usufruct* while it passes along. *Aqua currit et debet currere ut currere solebat* is the language of the law. Though he may use the water while it runs over his land as an incident to the land, he cannot unreasonably detain it, or give it another direction, and he must return it to its ordinary channel when it leaves his estate'.
>
> "While this is undoubted, and the rule obtains in those States in the Union which have simply adopted the common law, it is also true that as to every stream within its dominion *a State may change this common law rule* and permit the appropriation of the flowing waters for such purposes as it deems wise. Whether this power to change the common law rule and permit any specific and separate appropriation of the waters of a stream belongs also to the legislature of a Territory, we do not deem it necessary for the purposes of this case to inquire. We concede *arguendo* that it does."

Such well established rules of property have been relied upon for generations by property owners who have made substantial investments in such properties, paying value for riparian rights and expending large sums for the development thereof. Respondent, for example, has invested his personal fortune in acquiring lands, having extensive surveys and engineering studies made, all with the view of reaping his just reward from the lawful use of his property to produce power. He has proceeded to make his investment in reliance upon recognized property rights in the water power of non-navigable streams.

Petitioner has been unable to produce a single case of this Court or of any court of the land which holds that non-navigable streams and the water power therein are not capable of private ownership. On the other hand, cases holding that water power in non-navigable streams is capable of private ownership are legion, and invariably hold that compensation must be paid to the riparian owner for water power value when his lands are taken. *Swain* v. *Pemigewasset Power Co.*, 76 N. H. 498 (Sup. Ct. N. H. 1912); *Emmons* v. *Utilities Power Company*, 83 N. H. 181 (Sup. Ct. N. H. 1927); *Alabama Power Co.* v. *Herzfeld*, 216 Ala. 671 (Sup. Ct. Ala. 1927); *Willamet Falls C. & L. Co.* v. *Kelly*, 3 Ore. 99 (Cir. Ct. Ore. 1869); *Ford Hydro-Electric Co.* v. *Neely*, 13 F. 2d 361 (C. C. A. 7th 1926) *cert. den.* 273 U. S. 723 (1926); *Union Electric Light & Power Co.* v. *Snyder Estate Co., et al.*, 65 F. 2d 297 (C. C. A. 8th, 1933); *Weiser Valley Land & Water Co.* v. *Ryan*, 190 Fed. 417, (C. C. A. 9th 1911). The decisions in North Carolina follow the universal rule. *Brown* v. *Power Co.*, 140 N. C. 333 (Sup. Ct. N. C. 1905); *Nantahala Power & Light Co.* v. *Moss*, 17 S. E. 2d (Adv. Op.) 10 (Sup. Ct. N. C. 1941).

This Court has considered this problem in *United States* v. *Kelly*, 243 U. S. 316 (1917). The question raised there was whether the owner of a mill dam on a non-navigable stream could recover damages for loss of water-power value caused by the backing up of water by the erection by the government of a dam to improve the navigation on a navigable stream to which the mill stream was a tributary.* The argument made by the government in that case was identical with that made by Petitioner here. The Court said (243 U. S. 319):

> "A fundamental contention made in behalf of the Government, and one that applies to both cases, is that the control by Congress, and the Secretary of War acting for it, over the navigation of the Cumberland and Kentucky Rivers, must also include control of their tributaries, and that in order to improve navigation at the places mentioned in the findings it was necessary to erect dams and back up the water, and the right to do this must include also the right to raise the water in the tributary streams."

The Court did not deny the right of the government to acquire this land for purposes of improving navigation on the river below, but held that compensation must be paid for the property taken. It held squarely that under the state law, which was controlling, the landowner had property rights in the flow of the water, saying (243 U. S. 330):

> "Under the law of Kentucky, ownership of the bed of the creek, subject only to the natural flow of the water, is recognized as fully as ownership of the mill itself. The right to have the water flow away

* Damages to property on a stream not proven non-navigable were also involved in the companion case considered in the same opinion, *United States* v. *Cress*.

> from the mill dam unobstructed, except as in the course of nature, is not a mere easement or appurtenance, but exists by the law of nature as an inseparable part of the land. *A destruction of this right is a taking of a part of the land.*"

Again the Court noted the distinction between the power of Congress with reference to navigable and non-navigable streams, and again it indicated that even in the case of navigable streams that power was subject to the restraints of the Fifth Amendment. The Court held (243 U. S. 319):

> "The States have authority to establish for themselves such rules of property as they may deem expedient with respect to the streams of water within their borders both navigable and non-navigable, and the ownership of the lands forming their beds and banks (Citations omitted) *subject, however, in the case of navigable streams,* to the paramount authority of Congress to control the navigation so far as may be necessary for the regulation of commerce among the States and with foreign nations (Citations omitted); the exercise of this authority being subject, in its turn, to the inhibition of the Fifth Amendment against the taking of private property for public use without just compensation (*Monongahela Navigation Co.* v. *United States,* 148 U. S. 312, 336; *United States* v. *Lynah,* 188 U. S. 445, 465, 471."

Respondent has never contested the right of Petitioner to condemn his land for purposes of flood control and the production of power. He does insist, however, that where the government takes such property it must recognize the property rights therein established by the law of the state in which the property is located, and must give just compensation therefor.

Respondent has likewise always conceded that his property rights in the water power of his lands cannot legally be used in any way which would have a substantial adverse effect upon navigation in the river below. It is submitted that this is a sound view of the law, *United States* v. *Rio Grande Dam and Irrigation Company,* 174 U. S. 690 (1899), and, accordingly, there is in fact no need for the change in the law of property rights in water power on non-navigable streams contended for by Petitioner. The power of the Government to condemn or to prohibit any abuse of such property rights as would affect the regulation of commerce is assured. Respondent will demonstrate hereinafter (*infra,* pp 60-68) that in fact the operation of its four plant system would have no adverse effect upon navigation.

To determine the extent of Respondent's property rights we will now turn to a consideration of the law of the State of North Carolina.

B.

The Respondent Had Acquired a Valuable Property Right in the Water Power of the Hiwassee River Under the Law of North Carolina.

Respondent is the successor of the Carolina-Tennessee Power Company, a corporation of North Carolina, created by a special act of the Legislature on February 16, 1909. (Res. Ex. 1, R. 783, offered R. 24) whereby that corporation was given the right to develop water power and water storage on the non-navigable streams in North Carolina, and to that end to acquire by purchase or condemnation the right to use, employ and divert such waters.

Thereafter this corporation and its successor, the Southern States Power Company, together with a wholly owned subsidiary having similar powers, the Union Power Company, a corporation of Georgia, through their officers, representatives and engineers, entered upon and began an exploration of various sites and locations on the Hiwassee and Nottely rivers; making extensive surveys; staking out various sites and locations for its proposed dams, reservoirs and public works; taking appropriate corporate action adopting plans for hydro-electric developments, and adopting sites and locations for such; causing maps, surveys and plats to be filed with the proper state authorities showing the location of its proposed works and the lands necessary for their successful operation (R. 27-30, 39-43, 46-52).

As these explorations and surveys continued over the years, extensive study and research began to reveal the full possibilities of an integrated hydroelectric development of the two rivers. Appropriate changes in the plans were made, until in 1927, after many years of thorough and painstaking investigation, a comprehensive and final plan for the development had been reached and four dam sites had been formally adopted, as follows:

(1) a 200 foot dam on the Nottely River known as the "Nottely Development".

(2) a 245 foot dam on the Hiwassee River known as the "Powelson Development".

(3) a 110 foot dam on the Hiwassee River known as the "Appalachia Development".

(4) a 200 foot dam on the Hiwassee River known as the "Murphy Development".

(Res. Ex. 17, Rep. Charts Tab. 2, Offered Comm. Tr. 156).

The three tribunals below, after hearing extensive oral testimony upon this point and having received in evidence numerous exhibits consisting of maps, surveys, corporate minutes, etc., concluded that Respondent had complied with the law of the State of North Carolina and had acquired priority with respect to the development. (R. 779, 1055, 1074, 1075).

In reaching the conclusion that Respondent had acquired the sole and exclusive right to develop the water power in connection with his four adopted dam sites, each of the lower tribunals was undoubtedly aided by decisions of the Supreme Court of North Carolina, and of this Court, handed down in the course of the long and hotly contested litigation between the Carolina-Tennessee Power Company and a rival company, the Hiwassee River Power Company, much of which turned upon the very question here involved, *i. e.*, whether the Carolina-Tennessee Power Company had under the law of the state actually acquired a prior right to the water power in this territory.

This litigation was begun in 1914 when Respondent's predecessor instituted an action against the Hiwassee River Power Company. This litigation was well described by Mr. Justice Brandeis as follows:

> "The Carolina-Tennessee Power Company, a public utility, was incorporated by a private law of North Carolina with broad powers, including that of taking by eminent domain riparian lands of and water rights in any non-navigable stream of the state. It filed locations for two hydro-electric plants on the Hiawassee River and proceeded to acquire by purchase and by condemnation the lands and water rights necessary for that development. Thereafter

> the Hiawassee River Power Company was organized under the general laws of the State and threatened to locate and develop on that river hydro-electric plants which would necessarily interfere with the development undertaken by the Carolina-Tennessee Company. The latter brought in the Superior Court of Cherokee County a suit in the nature of a bill to quiet title. The case was tried in that court with the aid of a jury." *Hiawassee River Power Company* v. *Carolina-Tennessee Power Co.*, 252 U. S. 341 (1920), at page 342.

The first trial resulted in a verdict for Respondent's predecessor, and eventually came before the Supreme Court of North Carolina for review in 1916, (*Carolina-Tennessee Power Company* v. *Hiwassee River Power Company*, 171 N. C. 248 (1916)), where the decree below was reversed, and remanded for a new trial so that the jury might find more definitely certain facts as to plaintiff's action in surveying, staking out, and adopting its locations and filing the same. A new trial was then had, which again resulted in a decree in favor of Respondent's predecessor which again came before the North Carolina Supreme Court in 1918 (*Carolina-Tennessee Power Company* v. *Hiawassee River Power Company*, 175 N. C. 668 (1918)). The State court, after an exhaustive review of the entire case, held that Respondent's predecessor had acquired the prior right to develop the water power in this territory; that it had the power to exercise the right of eminent domain; and that it had not abandoned its project. Upon a writ of error this Court reviewed the judgment and, in the opinion delivered by Mr. Justice Brandeis, dismissed for want of jurisdiction, 252 U. S. 341 (1920).

The federal question relied upon was that the private act incorporating Respondent's predecessor was invalid, because it conferred upon that company the power of eminent domain which power it was contended was not granted under the general law to the Hiwassee River Power Company; it being claimed that thereby the guaranty of the 14th Amendment as to privileges and immunities of citizens and equal protection of the laws had been violated.

This Court held that the claim had not been presented to or passed upon by the Supreme Court of North Carolina. Thereafter, various actions were instituted by Respondent's predecessor against the Hiwassee River Power Company and others, seeking to condemn lands for this development, and resulting in judgments of condemnation. Upon appeal, (*Carolina-Tennessee Power Company* v. *Hiawassee River Power Company, W. H. Reese, et al.*, 186 N. C. 179 (1923)) the Supreme Court of North Carolina again held that Respondent's predecessor had acquired the prior right to condemn lands for its water power development; that the corporate existence of Respondent was regular and that it had the powers set out in its charter.

Thereafter, the litigation again came before the Supreme Court of North Carolina (188 N. C. 128 (1924)) with reference to different tracts of land. Again the court held that Respondent's predecessor had acquired the prior right to develop the water power, and again it sustained the constitutionality of its charter. Thereafter, upon writ of error, this court dismissed for want of jurisdiction by memorandum (267 U. S. 586 (1925)).

It is readily apparent therefore that the three tribunals below in reaching their decision as to the property rights

of Respondent herein under the law of the State of North Carolina had the benefit of the considered opinions of the highest court of that State upon identical problems.

In view of the foregoing it is submitted that there can be no doubt that under the law of the State of North Carolina, Respondent, as the riparian owner of its lands, and as the holder of a recognized franchise from the state, had acquired the entire property rights in the water power value of this development, and, accordingly, is entitled to compensation for their taking.

II.

This Court will not review concurrent findings of fact of the three tribunals below.

Even a cursory examination of Petitioner's Brief would reveal that it is largely devoted to an attempt to reargue the findings of fact which three successive tribunals below have made independently of each other.

Point II, 2a (Pet. Br. 48-52) deals minutely with the cost of erecting the four dams. The testimony of Respondent's expert Chambers is analyzed briefly, but although other expert witnesses of Respondent are ignored, Petitioner makes much of the evidence of higher costs presented by some five different experts for TVA, featuring extensive footnotes as to their qualifications.

Petitioner also details testimony with reference to annual fixed charges (Br. 52-57). Here one would conclude from Petitioner's presentation that Mr. Powelson was the only witness of Respondent on this point (Br. 56) since no

mention is made of Mr. Cassatt's* testimony. Indeed, while Petitioner narrates the testimony of its experts, Wheeler and Moreland, who were produced for the first time in the District Court, it is discreetly silent as to the testimony of its two other "experts" on this point before the Commissioners, Mr. Hunt and Mr. Barker. Petitioner even argues that its witness Wheeler was the "best qualified" expert (Br. 52), as if this Court would not only review the facts, but weigh the relative authority of experts.

A like analysis could be made of Petitioner's Point II, 2, c, d, and e, dealing with the amount of power the project could produce, the total cost thereof, and the price at which it could be sold (Pet. Br. 57-67), again all questions of pure fact. Petitioner likewise devotes a considerable portion of its Brief (pp. 67-82) to an attempt to show that upon the evidence there was no reasonable probability that it would be commercially developed for power purposes within the reasonably near future.

Manifestly, each of these questions is one of scientific or economic fact that is entirely within the competency of the three successive triers of fact.

Each of the tribunals below, after a careful consideration of more than 7,000 pages of testimony from sixty witnesses and after a study of more than 500 exhibits, and, in the case of the Commissioners, after a personal inspection of the property, has found concurrently that Respondent's property did have value for water power purposes (R. 771, 1056, 1076). The Circuit Court of Appeals held (R. 1076):

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* Mr. Cassatt for some 31 years was head of Cassatt & Company, Brokers, Bankers and Dealers in Investment Securities, having offices in Philadelphia, New York, Pittsburgh, Boston, Baltimore and other cities. His firm had participated in the great majority of all large utility flotations issued by New York or Chicago houses.

"The evidence established beyond question, we think, that considering the ever increasing demand for electric power the property did have value for water power purposes; and this was the concurrent finding of the Commissioners and the court below."

Respondent not only admits but insists that the cost of construction, the annual fixed charges, the amount of power available, the price at which it could be sold, the probabilities of commercial development of the project, all have a legitimate place in determining whether its property had water power value.

The findings of fact of the three tribunals below indicate beyond question that each of them did not always consider Petitioner's "experts" the "best qualified", but each concluded that the experts of Respondent were entitled to credence. Respondent insists that an examination of the entire record entirely supports the opinion of the Circuit Court of Appeals that the presence of water power here is "beyond question" (R. 1076). Under no stretch of the imagination could it be fairly said that the findings of the three tribunals are clearly erroneous or unsupported by substantial evidence. In such circumstances the cases clearly hold that this Court will accept the findings below as a conclusive basis for decision. *Virginian Railway Co.* v. *System Federation No. 40*, 300 U. S. 515 (1937); *United States* v. *O'Donnell*, 303 U. S. 501 (1938); *Page, Trustee* v. *Arkansas Natural Gas Corp.*, 286 U. S. 269 (1932); *Great Northern Ry. Co.* v. *Weeks*, 297 U. S. 135 (1936); *Pick Manufacturing Co.* v. *General Motors Corp.*, 299 U. S. 3 (1936); *Texas & New Orleans R. R. Co.* v. *Brotherhood Railway & Steamship Clerks*, 281 U. S. 548 (1930); *Washington Securities Co.* v. *United States*, 234 U. S. 76 (1914); *Texas & Pacific Ry. Co.* v. *Railroad Commission of Louisiana*, 232 U. S. 338 (1914).

III.

The three tribunals below properly found as a fact that the lands of Respondent have water power value.

A.

The four developments of Respondent could produce each year 587,000,000 K.W. hours of primary power or 512,500,000 K.W. hours of super primary power, and could supply a firm demand capacity of 167,200 K.W. corresponding to an annual load factor of 35%.

It is believed that the present case before the Court is truly unique in the painstaking and exhaustive thoroughness with which the necessary scientific data has been prepared by the Respondent.

Gross Power.

The capacity of any given stream to produce power is a question of fact which can be determined by competent engineers with a high degree of accuracy. The only data that the engineer needs for such computation is (1) the hydraulic head, and (2) the record of the volume of flow of the stream at or near the dam sites, over a long period of years.

Again the present case is unique in that scientific data was available on these points which was so conclusive that it has never been disputed by Petitioner.

The property of Respondent was readily adaptable to the development of great hydraulic heads because the fall of the Hiwassee River in this territory is unusually great. It is undisputed that in the short space of 46 miles from

the upper end of the Murphy Reservoir to the dam site at Appalachia the fall of the river is 555 feet (Res. Ex. 17, Rep. Charts Tab. 2, offered Comm. Tr. 156) as compared with the fall of 378 feet in the Tennessee River between the lower end of Gilbertsville Dam and the upper end of Chickamauga Dam over a distance of 490 miles. The fall in the Hiwassee River here is 12½ feet per mile as compared with a fall in the Tennessee River of 9 inches per mile. In other words the rate of fall is *sixteen times* greater than that of the Tennessee River. Furthermore, the fall from the upper end of the Murphy Reservoir to the bottom of the Gorge immediately below Appalachia is 970 feet in a distance of 63½ miles (R. 73), a fall of 15.3 feet per mile, and *twenty times* greater than the rate of fall in the Tennessee River. There was available for effective use a net head of 911.9 feet (Res. Ex. 278, Rep. Charts Tab. 24, offered R. 198).

The fall of the Hiwassee was conservatively described by the District Court in its finding as "decidedly greater than that of the average stream used to generate hydroelectric power" (R. 1055). The fall of the Hiwassee River and Nottely River as compared with the Tennessee River of which it is a tributary is graphically illustrated in Respondent's Exhibit 203 (Rep. Charts Tab. 4, offered R. 75). Profiles of the Tennessee River and all of its major power producing tributaries are graphically presented on Respondent's Exhibit 190, being a copy of a chart prepared by army engineers (Rep. Charts Tab. 3, offered R. 63).

The United States Geological Survey has maintained gages on the Hiwassee River since 1898 (see Res. Ex. 280, Rep. Charts Tab. 25, offered R. 200), and on the Ten-

nessee River since 1874. The daily stream flow records which were compiled from these gages on the Hiwassee River, and from those on the Tennessee River which could be correlated to the former (Res. Ex. 242, Rep. Charts Tab. 20, offered Comm. Tr. 1139), give an accurate record of the stream flow for a period of over 62 years, covering all imaginable types of periods of drought and flood (Res. Ex. 221, offered Comm. Tr. 1014). These stream flow records are almost the longest continuous stream flow records existing in the United States and as such readily enable an engineer to compute the flow of water that will be available throughout the years.

It is likewise undisputed by Petitioner that dams could be erected at Powelson, Appalachia, Murphy and Nottely with heads as follows (Res. Ex. 17, Rep. Charts, Tab. 2, offered Comm. Tr. 156):

Appalachia	110 feet
Powelson	245 feet
Murphy	200 feet
Nottely	200 feet

The Petitioner likewise does not dispute that the reservoirs created by the projected dams would be exceptionally large and would store water as follows (Res. Ex. 17, Rep. Charts, Tab. 2, offered Comm. Tr. 156):

Murphy	39,250,000 cu. ft. water
Nottely	22,290,000 " " "
Powelson	17,250,000 " " "
Appalachia	2,860,000 " " "

The top level of the reservoirs thus created would be located at high altitudes as follows (Res. Ex. 17, Rep. Charts, Tab. 2, offered Comm. Tr. 156):

Nottely	1810	feet	above	sea	level
Murphy	1720	"	"	"	"
Powelson	1520	"	"	"	"
Appalachia	1275	"	"	"	"

Upon the basis of the foregoing, *i. e.* the amount of stream flow, the altitude and capacity of the reservoirs, the fall in the river and the height of the dams, the minimum dependable potential water power of the four dam project could be scientifically computed with a high degree of accuracy.*

Petitioner admits there is no serious dispute on these facts (Br. 58) and two of its expert witnesses frankly admitted that as to potential energy the experts agreed. Dr. Waddell stated:

> "Now, the difference between Mr. Powelson's conclusions and our conclusions is the difference in the efficiency that we figured on as against the efficiency that he figures on, but on the basic starting point, we are together" (R. 701).

Mr. Ayres stated:

> "Briefly the result of that computation is that the theoretical power of the river is substantially as testified in this case" (R. 682).

Power Available for Sale.

Petitioner has stated correctly that the differences in opinion of the experts as to the amount of power that could

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* Mr. Powelson made all of his computations as to available power in every case with the accurate history of the stream flow since 1874 in mind, *e. g.* when he estimated 587,000,000 kilowatt hours per year could be produced, he meant that this development if operating could have produced that amount during *every* year since 1874 (R. 111).

be produced for sale, was not caused by differences as to available gross power, but rather by differences in estimates of the amount of losses in transforming the water energy into energy for sale (Pet. Br. 58).

The amount of power that could be produced by the development was one of the questions of scientific fact that was the subject of unusually careful proof in this case. To sustain this burden Mr. Powelson and his staff prepared a series of log sheets demonstrating mathematically by approved formulas that Respondent's four developments could generate each year not less than 587,000,000 K. W. hours of primary power, or 612,500,000 K. W. hours of Saluda type super primary power of 35 per cent annual load factor. This was established for a period from June 1924 to September 1936, which included the worst periods from the standpoint of power production that had been experienced on the river in over sixty years.

These log sheets show among other things, the average natural flow at each of the dam sites for each month of a period from 1924 to 1936, the hydraulic heads at the dams each month, the efficiencies at which water wheels and generators were operated, reservoir surface areas, rate of evaporation, rainfall, and the rate of run off (R. 387-390). Mr. Powelson caused twenty-nine of these sheets to be prepared for twenty-nine combinations. Upon one log sheet alone appear some 25,000 mathematical determinations (R. 244).. The Court is urged to inspect two of these sheets computing the operation of the four plants to produce 586,920,000 K. W. hours per annum equal to 67,000 K. W. of continuous power, in order to comprehend the painstaking care of Respondent's proof. (Res. Exs. 300, 300A, Rep. Charts Tabs. 27; 28, 29, offered R. 459.)

All of these log sheets were available to Petitioner and its engineers for examination (R. 348). The very detail and breadth of this testimony was such as to make it a sure prey for cross examination or for direct evidence by Petitioner's witnesses, yet no substantial inaccuracies were shown in these sheets. It is true that Petitioner's experts testified that Respondent's development could not produce as much power as the sheets showed, but they did not undertake to show how they arrived at what they claimed to be a true figure, nor could they point to substantial inaccuracies in Powelson's log sheets.

Turbine and Generator Efficiencies.

The most important source of loss between gross power and saleable energy is found in the inability of generators and turbines to function at 100 per cent efficiency (Pet. Br. 58). In preparing the log sheets Mr. Powelson used an average turbine efficiency of 92.9 per cent and an average generator efficiency of 97.5 per cent, giving an overall efficiency of 90.47 per cent, which he testified could be achieved with modern equipment (R. 346). Professor Palsgrove,* Mr. Bevan and Mr. Dimock likewise testified that this efficiency could be achieved, (R. 458, 473, 479, 489) although the Petitioner's Brief would seem to suggest that only Mr. Powelson testified (Pet. Br. 59).

Petitioner suggests here that Mr. Powelson's testimony should not be relied upon. This is strange, indeed, since Mr. Powelson's figure for efficiencies was slightly less than the records of the actual performance of the water wheel units at the Government's own Norris dam where efficien-

* Professor of Hydraulic Engineering at Rensselaer Polytechnic Institute; from 1921 to 1927 associated with I. P. Morris Company of Philadelphia, one of the four largest manufacturers of water wheels and hydraulic turbines, as engineer on tests and designing (R. 453, 454).

cies slightly higher than Mr. Powelson used were actually obtained under ordinary working conditions (R. 478). He likewise relied upon tests made on a model of the Norris Dam wheel in a testing flume at Holyoke, Mass. (R. 468, 628). It was upon these tests that the Tennessee Valley Authority relied in placing its order for its Norris wheels (R. 469). Faced with this supporting testimony, Petitioner's chief witness on this subject, unable to reconcile his own figures with the Holyoke tests, finally asserted the Holyoke tests must be incorrect (Comm. Tr. 3972). The curves of efficiency of the 161-inch Norris wheel tested when in place (Res. Ex. 323, offered R. 470), show an overall efficiency of turbines and generators of 91.32 per cent as compared to Mr. Powelson's figures of only 90 per cent.*

*TABLE XVIII.

161" Diameter Unit 2 Norris Wheel

Load on Turbine in % of Its Full Load Capacity	Combined Efficiency of Turbine and Generator Shown by Test	Efficiency of Generator Alone	Efficiency of Turbine Alone Shown by Test	38½" Diameter Model Wheel Efficiency of Turbine Alone Shown by Test
66%	90.7%	98.2%	92.4%	92.8%
68%	91.0%	98.2%	92.7%	93.0%
70%	91.2%	98.2%	92.95%	93.3%
72%	91.3%	98.2%	93.10%	93.5%
74%	91.5%	98.2%	93.20%	93.5%
76%	91.6%	93.2%	93.30%	93.6%
78%	91.6%	98.2%	93.30%	93.5%
80%	91.5%	98.2%	93.20%	93.2%
82%	91.4%	98.3%	93.00%	92.9%
84%	91.3%	98.4%	92.80%	92.5%
86%	91.0%	98.3%	92.60%	92.0%
Weighted average efficiency throughout loading range above	91.32%	98.2%	93.0%	93.14%
Weighted average efficiency taken from Company's log sheets	90.0%	97.5%	92.3%	

Petitioner has sought to make it appear that Respondent's witness Creager testified that 87 per cent would be the maximum efficiency (Br. 59). If the Court will refer to that portion of the record cited (R. 430), it will find that Mr. Creager in fact stated that 90 per cent was the maximum that could be hoped for and 87 per cent would be a *conservative* estimate. The witness later explained that by "conservative" he meant a figure probably lower than one would expect to get, a figure used to be very safe (R. 435).

The evidence which Mr. Powelson gave to prove that the four developments could produce each year 587,000,000 K. W. hours of primary power or 512,500,000 K. W. hours of super primary power and could supply a firm demand capacity of 167,200 K. W. corresponding to an annual load factor of 35 per cent (R. 201) was entirely supported by the testimony of Professor Palsgrove (R. 456-459) and by Mr. Bevan (R. 487), an outstanding hydraulic engineer (R. 480-484).

It is clear, therefore, that the evidence offered by Respondent on this point was of a very substantial character, and although the three tribunals below have not made any specific finding as to the exact amount of power that could be produced, it is fair to assume that in reaching their finding that Respondent's property had water power value, this testimony was accepted as of substantial value.

B.

The Total Cost of the Power.

Construction Costs.

Petitioner has again attempted to raise a question of fact as to the cost of construction (Pet. Br. 60). On this point Respondent called two outstanding figures* in the construction field, who testified at great length as to the construction costs of the dams and powerhouses. These witnesses have had a great deal of highly responsible experience as building contractors not only in estimating costs and bidding on hydro-electric projects, but in actually constructing them. Of the six experts offered by Petitioner on the other hand, Mr. White was the only one who had actual experience in constructing hydro-electric plants.

Mr. Chambers and Mr. Deutschbein had spent many months in estimating the cost of this project, preparing drawings, figuring quantities (which Petitioner's experts accepted entirely) and doing all the many things necessary to prepare a *contractor's bid*. Mr. Chambers testified his figure was a conservative contractor's bid and that he would undertake the project at that figure, but he added that in

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* Ralph H. Chambers and H. J. Deutschbein. Mr. Chambers was the Chief Engineer and Engineering Vice-President of the Foundation Company of New York, one of the largest engineering and construction companies in the world, doing an international business. He had personally estimated upon the cost of engineering projects aggregating more than $500,000,000 and had been in responsible charge of the construction of most of those projects including many important hydro-electric projects (R. 168-170).

Mr. Deutschbein is likewise a graduate engineer of distinction, the president of H. J. Deutschbein & Co., a firm actively engaged in building engineering projects of great difficulty and magnitude. He was a former President of the Foundation Company. He has had extensive experience in hydro-electric construction (R. 437).

competition he would never get it because he was sure to be underbid (R. 750).

Another one of the reasons for the difference in estimates was the use of the TVA wage scale which was used by Petitioner's experts (R. 604, 605, 693, 718). Of the total direct labor and material cost, from 40 per cent to 50 per cent would be the cost of labor (R. 743). Dr. Arthur Morgan, Chairman of the Board of TVA, testified before a Congressional Committee that the TVA rates of labor ran, "seldom less than 50 per cent higher than at private dams and from that up to more than 100 per cent higher" (R. 720). Evidence was offered in the present case which showed that the TVA scale for common labor, carpenters, and mechanics was on the average at least 66 2/3 per cent higher than that paid at the New River Dam at Radford, Virginia (R. 722-725), which was being built at the same time as the hearing in this case before the Commissioners. The use of this wage scale, which was considerably in excess of wages paid on similar projects in this area, largely accounted for the difference in cost estimates (R. 744).

In view of the foregoing it is submitted that the three tribunals below were entirely justified in relying upon Respondent's estimate of the cost of construction of the dams and powerhouses.

Annual Fixed Charges.

Petitioner again attacks Respondent's estimate that the annual fixed charges on the project would not exceed 5.55 per cent of the cost of the development (Pet. Br. 52-57).

In calculating the depreciation of the project, Respondent adopted the so-called sinking fund method, using stand-

ard sinking fund tables. Accordingly, Respondent included in its annual charges for each year a sum for depreciation which if invested at 4½ per cent, by retiring Respondent's 4½% bonds or otherwise, would provide the necessary cash to replace all parts of its construction and equipment at the end of their respective useful lives (R. 371). No witness was offered by Petitioner to dispute the useful life which Respondent testified the dams, reservoirs and various items of machinery had.

Petitioner contends for the fourth time that Mr. Powelson's estimate of $228,000 for all annual taxes was too low, and relies upon the estimate of one of its experts as to what taxes on a project usually are (Pet. Br. 56-75). Petitioner is discretely silent as to the testimony of another of its "experts" who, in attempting to refute Mr. Powelson's figure, testified that the land taxes alone would equal $223,421 in Cherokee County and $85,375 in Union County (Hunt, Comm. Tr. 4259-60). These figures were offered seriously, despite the fact that in 1937 the total taxes levied by Cherokee County was $138,000 and the total levied by Union County was $30,000.

Petitioner again contends that Respondent's figure on the cost of financing was too low (Pet. Br. 52-56). An examination of the entire record in this case, however, establishes that Respondent's figure of 4½ per cent was a very conservative one. If the same thorough and exhaustive presentation as to the value of this development were made to bankers and their engineers, or to large established utility companies, proving that super primary power could be produced here at a cost of 3.75 mills (Res. Ex. 282, offered Comm. Tr. 1470) and sold for 6.34, it cannot be

doubted that the investment would be attractive and the rate for money would be low and certainly not over 4½ per cent.

Mr. Powelson was well aware of all these factors in arriving at his figure of 4½ per cent. As he pointed out, the financial set up with respect to bonds, preferred stock and common stock was a matter for negotiation with the bankers. In setting up his figures he used a bond issue for financing at 4½ per cent and on that basis showed a surplus of 99.2 per cent (Res. Ex. 282, offered Comm. Tr. 1470). He knew that the Saluda development had been financed by bonds and notes alone in the sum of $22,000,000 (R. 241).

Mr. Powelson's testimony was amply supported on this point by Mr. Cassatt who was head of Cassatt & Company, brokers, bankers, and dealers in investment securities, from 1906 to 1937. His firm had participated in the great majority of all large utility flotations in the last 20 years. (R. 1001). Mr. Cassatt testified that the development could have been financed on the basis of a bond issue at 4½ per cent. He pointed out that the great majority of public utility financing in the last 15 to 20 years has been through bonds (R. 1002). He was further of the opinion that a large established utility could have financed it at 3½ or 3¼ per cent (R. 1003).

Petitioner (Pet. Br. 54) accuses Respondent of improper tactics in that Professor Baumeister, testifying as an expert to the cost of a steam plant, stated that annual charges would be 12½ per cent (R. 992) and the cost of money 6 to 7 per cent. Professor Baumeister very frankly stated that he was not qualified to speak with reference to fixed charges on a hydro plant (R. 993). There is no incon-

sistency, however, in this testimony, since hydroelectric plants are inherently a far different proposition from a financing standpoint. Once the dams and powerhouses are erected, the overhead becomes practically static, since the maintenance and operation of the plants require very little labor. The steam plant is at the constant mercy of changes in such items as fuel cost and labor costs. Likewise, the depreciation on steam equipment, which operates under very high pressures and temperatures, is much more rapid than in the case of hydroelectric projects.

C.

The Price at Which the Output Could Be Sold.

Petitioner again attacks Respondent's proof that the super primary power here involved could be sold for 6.34 mills per kilowatt hour (Pet. Br. 60), and contends that the selling price would depend on (1) the alternative cost of steam production and (2) the urgency of the need for power (Pet. Br. 61).

Respondent established below that the demand for power has been and is increasing throughout the United States and that there was definitely a market for its product in the near vicinity of its project. Petitioner admitted that there was a market for super primary power and that there would be an increased demand for power (Comm. Tr. 989, 1908). In its 1936 Report to Congress, the Tennessee Valley Authority states:

> "There is every indication that the market for power will continue to grow steadily, and that the

> problem in the Tennessee Valley region will not be to find a demand for power, but to produce the power to meet the demand'' (R. 99).

Before a Congressional Committee the witness Krug, Tennessee Valley Authority Chief Power Planning Engineer, testified on December 7, 1938, as follows:

> "It is now apparent that it will be necessary for the private companies or public agencies in the area to install over 850,000 kilowatts of additional generating capacity during the next eight years, as the 1,400,000 kilowatts of capacity which will become available under the Authority's program will be far from sufficient to meet estimated additional power required'' (Comm. Rec. 4888-89).

Mr. Thomas, who was an expert witness for the T. V. A. in the Eighteen Power Co. case in January 1938 as to the market for power, testified that by 1939 there will be a shortage in the territory of Respondent's development of 770,900,200 kwh. of energy and that by 1943 the shortage would be 2,169,500,000 kwh. (R. 411, Res. Ex. 303, offered Comm. Tr. 2368). Mr. Thomas had made a study of the market for power for the TVA prepared from an examination of the data and records of the Federal Power Commission. A statement showing a result of these studies was offered by the TVA as an exhibit in the Eighteen Power Company cases and Respondent introduced a copy of it into evidence here (Res. Ex. 303, offered Comm. Tr. 2368). Upon the basis of the data shown there Respondent prepared Exhibit 358 (which Mr. Thomas approved as correct in all respects), showing a forecast of deficiency of energy for Commonwealth & Southern, Carolina Power & Light—

Western Division, and Tennessee Public Service Co. It shows that the annual load factor of that deficiency is 35.4 per cent and that the great bulk of power to supply the deficiency would be taken in six consecutive months of the year. This shows that the deficiency in the year 1943 is 1,733,000,000 kwh. and further that the super primary power of Respondent's development could supply only 29.5 per cent of the deficiency.

Respondent will not further burden this Court with details as to the great mass of testimony and many exhibits introduced in this case dealing with this point. Again, the question of market is one of pure fact and is not a proper subject of inquiry here. Furthermore, this Court will take judicial notice that the power shortages forecast in this area by Respondent's witnesses became a very unpleasant fact months before the outbreak of war.

Respondent not only proved that its super primary power of 35 per cent annual load factor would find a market, but he also established that it could be sold at 6.34 mills per kwh. delivered at his development.

The only large hydro-electric development in this territory which supplies a super primary service is the Saluda development of the Lexington Water Power Company (R. 158). This plant was built between 1927 and 1930 and made contracts with the Duke Power Company and the Carolina Power & Light Company, whereby the latter agreed to purchase annually 300,000,000 kwh. of super primary power at an average price of 6.34 mills per kwh. over a period of *50 years* (Res. Exs. 230, 231, 232; R. 788-791; offered Comm. Tr. 1090). Mr. Powelson testified that Respondent's development could produce twice as much Sa-

luda type super primary power as the Lexington Water Power Company has been able to produce and that Respondent could produce it at a lower cost. Mr. Powelson also testified that whereas Respondent's developments could produce this power at 35 per cent load factor at a cost of 3.75 mills per kwh., it would cost 5.5 mills per kwh. to produce similar power by steam (R. 386, 387). Upon cross examination, he testified that 50 per cent load factor could be produced at about 5.5 mills per kwh. At the trial before the Commissioners, Petitioner offered no proof to contradict this testimony. Petitioner's witnesses Uhl and Ayres did testify that it would cost 5 mills per kwh. to produce 55 per cent load factor power by steam (R. 664, 677), and this was substantially in accord with Mr. Powelson's figure of 5.5 mills for this load factor (R. 766). The Report of the Power Authority of New York substantially confirms that cost (Res. Ex. 256, R. 792). Obviously then the entire proof before the Commissioners clearly sustained Respondent's claim that 35 per cent load factor steam power would cost 7½ mills per kwh. and Respondent's contention that it could sell power produced at its hydroelectric development for 6.34 mills was established.

Petitioner then attempted to save the day by calling Dr. Moreland at the trial before the District Court. Dr. Moreland obligingly discredited Petitioner's witnesses Messrs. Uhl and Ayres by testifying that 35 per cent load factor power could be produced by steam for 3 mills (R. 864-865, 868). As Judge Webb very properly pointed out, Petitioner was using a new witness to contradict two of his own witnesses (Ct. Tr. 369).

Respondent thereupon produced Mr. Baumeister, a consulting engineer on steam plants for the American Gas &

Electric Co., experienced in the actual construction and operation of steam plants. He testified that the cost of producing steam power comparable to that offered by Respondent at 35 per cent load factor would be 7.21 mills per kwh.

Accordingly on this phase of the case the three tribunals below had the benefit of the testimony of Respondent's Mr. Baumeister, and Mr. Powelson; Petitioner's Mr. Uhl, and Mr. Ayers; all in substantial agreement. Dr. Moreland alone offered contrary testimony.*

It is manifest that upon such a record there can be no question but that the lower tribunals were entirely justified in placing reliance upon Respondent's testimony.

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* Dr. Moreland is not only contradicted by the witnesses above mentioned but by a report of the Federal Power Commission "Federal Power Commission, National Power Survey, Interim Report, Power Series No. 1", dated 1935, and particularly by the chart on page 20 thereof, entitled "Trend of Fuel Consumption of Steam Electric Generating Stations in the United States". On that chart is a curve marked "Typical Modern Power Station". That curve shows the pounds of coal of 13,000 BTU per pound which were required to be consumed per kwh by typical steam power stations modern at the several dates shown on the chart.

The following table showing the figures on the chart in table form (presented in our main brief in the court below and not challenged by the Government) lists in column 2 the pounds of coal of 13,000 BTU per pound consumed at typical modern power stations per kwh from the years 1914 to 1934 inclusive.

Years	Pounds of Coal, Having 13,000 B.T.U. Per Pound, Consumed Per K.W.Hr.	Years	Pounds of Coal, Having 13,000 B.T.U. Per Pound, Consumed Per K.W.Hr.
1914	1.6	1925	1.15
1915	1.56	1926	1.07
1916	1.53	1927	1.02
1917	1.52	1928	1.0
1918	1.51	1929	1.0
1919	1.51	1930	1.0
1920	1.51	1931	1.0
1921	1.5	1932	1.0
1922	1.47	1933	1.0
1923	1.4	1934	1.0
1924	1.27		

The Conclusion of Three Tribunals Below.

We have sketched briefly some of the more salient testimony upon which the parties were in dispute. Upon each of these points literally hundreds of pages of testimony were heard and many exhibits presented. At the same time much testimony and many exhibits were offered on other factual questions which are no longer contested by the government. Elaborate briefs were filed below analyzing the testimony from a factual, scientific standpoint. Three tribunals upon a consideration of all the testimony, although they have not expressly adopted Respondent's figures on the foregoing, have decided that they are entitled to weight and have concluded that the use of Respondent's property for a hydro-electric development furnishes the use or basis for the greatest value inherent in the property (R. 733, 774, 1056, 1076). Respondent submits that there is substantial evidence in the Record to support this concurrent finding and that, accordingly, it should be accepted as conclusive by this Court.

IV.

There was a reasonable probability that Respondent's land would be commercially developed for water power purposes within the reasonably near future.

A.

Reasonable Probability of Commercial Development.

Petitioner seems to assume in its brief (Pet. Br. Point II, B. p. 71 *et seq.*) that because the development planned by Respondent had not been completed by the time of the

institution or this action there was no reasonable probability that it would ever be. This is far from the fact as a brief sketch of some of the surrounding circumstances will indicate.

It is a fact, as Petitioner states, that one of Respondent's predecessors did begin the purchase of lands as early as 1913, but Petitioner fails to note that in 1914 a rival power company, the Hiwassee River Power Company, began to buy lands in the same water basins, and litigation resulted which was bitterly contested for 10 years, terminating only in 1924 (see *supra*, pp. 33-35). In that litigation Respondent's prior right to the water power of this area was challenged as well as the constitutionality of its power of eminent domain. Small wonder, then, that conservative management proceeded cautiously during the pendency of such vital litigation (R. 283).

During this time some land was acquired, however, and surveying and explorations continued. Although Respondent's predecessors had always realized some of the power possibilities of the river, it was not until about 1925 that the research of Mr. Powelson and his engineers began to reveal the true possibility of an integrated hydro-electric project with four dams and reservoirs (R. 283). For example, it was not until 1924 that Respondent's chief surveying engineer made the first exploratory survey of the Nottely project and began to obtain options on various tracts therein (Comm. R. 1267, 1268). It was not until 1926 that Respondent incorporated the Union Power Company in order to acquire the necessary dam site and reservoir lands in Georgia (Comm. Tr. 212). Thereafter, during the next few years extensive surveying and staking out of this en-

tire reservoir area was undertaken (Comm. Tr. 1269). The necessity for such extensive preliminary work is undoubtedly one of the reasons why utilities customarily buy sites for the development of hydroelectric power years in advance of their actually being used for that purpose. This well recognized practice was testified to by both Mr. Bevan and Mr. Creager (R. 503, 426).

After the termination of the first phase of the litigation with the Hiwassee River Power Company, Respondent had brought proceedings to condemn the lands of the rival power company and proceeded to acquire other lands by purchase. Although Respondent has acquired ownership of the four strategic dam sites and some 22,000 acres of land in all for reservoir purposes, it has never condemned any land aside from that of the Hiwassee River Power Company. In areas such as were involved here, it is most unwise to resort to condemnation proceedings except as a last resort. Even a utility company must remember that it must live with its neighbors. After the litigation had been concluded, it began to negotiate voluntary purchases, however, which continued in quantity up until 1930, at which time the depression called a halt to purchases (R. 323). Since Respondent had the power of eminent domain, and had acquired ownership of all the strategic dam sites, and since it had established its prior right to water power development, there was no point in proceeding to acquire the remaining lands until just before construction work was begun, because in the meantime the developer would have invested considerable amounts of money which for the time being would be lying idle (R. 323). Nevertheless, Respondent continued actively to complete the necessary basic engineering investigations and surveys during 1931, 1932, 1933 and 1934 (Comm. Tr. 1259-1260; R. 295).

Mr. Powelson himself testified that the period from 1920 to 1931 was a period of intensive development in hydro-electric projects (R. 337). He realized, however, that when money was bringing 7 to 10 per cent the financing of the project would be temporarily out of the question (R. 338). The projects that were being erected during this era were projects that had to be built by utilities to meet the demands of their markets (R. 338), but not as new enterprises.

Respondent made no attempt to sell his lands for he had bought them as a developer and was biding his time for the auspicious occasion to commence construction (R. 338). He likewise made no attempt to borrow money to finance it at that time (R. 339). Respondent was waiting until such time as the approaching shortage of power would make itself felt, and at the time of the institution of this suit the time was rapidly approaching (R. 193, 194). The definite indications of the power shortage which was rapidly becoming acute in this area have already been presented (*supra*, pp. 51-53).

Time has completely established the truth of such predictions of shortages to the common knowledge of every citizen. Whether or not the time for the profitable development of this project had arrived or would arrive in the reasonably near future is after all merely a question of fact.

The Commissioners found (R. 773):

> "If the time has not yet arrived for the utilization of the Respondent's property as the site of a power plant, the growing need and the expanding uses for electricity warrant a finding that such a demand will not be long delayed."

The District Court held (R. 1056):

> "• • • the growing need and the expanding uses for electricity warrant a finding that a market exists for the property of the Respondents for such use."

The Circuit Court of Appeals concluded (R. 1076):

> "The evidence established beyond question, we think, that considering the ever-increasing demand for electric power the property did have value for water power purposes; and this was the concurrent finding of the commissioners and the court below."

It is therefore submitted that in view of the authorities cited in Point II hereof (*supra*, p. 38) this Court should treat as conclusive the fact that Respondent's property could have been profitably developed as a hydroelectric project within the reasonably near future.

B.

Alleged Obstacles to Development.

(1)

The Operation of Respondent's Developments Would Not Have an Adverse Effect on Navigation.

It is undisputed that all of Respondent's dam sites and reservoirs, except the Nottely development in Georgia,* were located on the non-navigable portion of the Hiwassee River in that section thereof beginning at a point (Ap-

* The Nottely development is located on the Nottely River, a non-navigable tributary of the Hiwassee River.

palachia dam site) approximately 23 miles upstream from Savannah Ford, the historic head of navigation, and extending up the Hiwassee River to a point which is 70 miles upstream from Savannah Ford (R. 1098). The beginning point at the natural water level at the Appalachia dam site is at an elevation approximately ~~553~~ 461 feet higher than Savannah Ford; and the ending point is at an elevation approximately 1,000 feet higher than Savannah Ford (Res. Exs. 17, 190, 203, Rep. Charts Tabs. 2, 3, 4). While Petitioner nowhere contends or even suggests that this portion of the Hiwassee River with its very steep gradient could be made navigable, nevertheless, Petitioner attempts to base several of its arguments, on the contention that the operation of Respondent's development would have a substantial adverse effect upon navigation below (Pet. Br. Point I, pp. 27-42).

The only witness presented by Petitioner on this point was Mr. Barker, a TVA engineer, and it is submitted that upon his evidence alone, without regard to Respondent's testimony, Respondent's project could be operated without a substantial adverse effect upon navigation.

As the basis for his testimony Mr. Barker had prepared two exhibits (Pet. Ex. 2-P, 2-Q, offered R. 546) showing the navigable depths of the Hiwassee between Charleston and Savannah Ford, and between Charleston and the mouth of the Hiwassee River in the period during March, April, and May of 1925. The charts also purport to show the depths that would have existed during this period, if no water at all was released from the developments above (R. 546).

In preparing these exhibits, Mr. Barker assumed that Respondent would so operate his development that no water would be allowed to pass over any of his dams during the period from June 1 to November 30 in each year (R. 551). However, it was never Respondent's intention, and there is no evidence that it was Respondent's intention, to operate his developments in this fashion. Respondent did introduce two charts (Res. Ex. 243, 244) to show the unusual storage possibilities of his development whereby he could generate nearly as much super primary power from June 1 to December 1 with a complete shutdown for the remainder of the year, as could be generated if he had been operating every day of the year to generate Saluda type super primary power. Respondent did not offer any evidence that it was his intent to so operate, nor that such operation would be more profitable than the operation to produce Saluda type super primary power. Respondent, however, did offer Exhibit 237 (Rep. Charts Tab. 17, offered R. 134) to show the details of the deliveries of power which it proposed to make as Saluda type super primary power. This exhibit states in terms and shows graphically that the purchaser of Saluda type super primary power must take each month 2.6 per cent of the total annual electrical energy contracted for. It does not show that the generation of Saluda type super primary power requires the generation of power to be suspended for six consecutive months of each year. It shows just the contrary. It shows that power must be generated every day of every year.

Mr. Barker was accordingly not justified in assuming there would be a complete shut-down for six months. Indeed, Respondent offered evidence that his development

could be so operated as to produce 67,000 kilowatts of continuous dependable power every year (Res. Ex. 228, Rep. Charts Tab. 13, offered R. 120). This operation would have been continuous in nature, calling for no shutdowns. *Mr. Barker on cross-examination stated categorically that such operation would have no adverse effect on navigation* (R. 560).

Respondent also introduced Exhibit 404 (Rep. Charts, Tab. 41, offered Comm. Tr. 5592), by which it was proved that the operation of Respondent's developments to generate Saluda type super primary power (R. 754) would so regulate and even up the flow of the Hiwassee River by the use of stored waters as to greatly improve navigation thereon. This Exhibit shows that during the period of lowest natural flow known on the Hiwassee River, namely, from 1924 to 1929, the use of Respondent's developments to generate Saluda type super primary power would have had the effect of raising the minimum monthly navigation depth in the Hiwassee River below Charleston from 1.78 feet to 3.36 feet. If Respondent's development had been in operation, this minimum would have occurred in June rather than in September, 1925. This Exhibit further shows that had Respondent's developments been in operation during the record low month of 1925 (September) generating super primary power, the navigation depth in the Hiwassee River below Charleston during September 1925 would have been 4.78 feet instead of the actual navigation depth of 1.75 feet experienced during that month.

The table* in the footnote is a compilation of the information shown on Exhibit 404 (Rep. Charts, Tab. 41). It is clear proof that the operation of Respondent's developments to produce Saluda type super primary power would so regulate the flow of the Hiwassee River by the use of stored waters that no adverse effect could possibly be pro-

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*Navigable Depths in Hiwassee River During Period 1924 to 1929 Between Savannah Ford and Charleston, Tennessee, and Between Charleston and Mouth of River

(1) Month	(2) Navigable depths corresponding to natural flow of River from mouth of Hiwassee River to Charleston, Tenn. (Feet)	Navigable depths based on flow of River as regulated by operation of Respondent's developments to produce Saluda type super primary power (3) Mouth of Hiwassee River to Charleston, Tenn. (Feet)	(4) Charleston, Tenn. to Savannah Ford (— 1 ft.) (Feet)
1924			
July	4.80	5.73	4.73
Aug.	3.35	4.75	3.75
Sept.	3.14	4.93	3.93
Oct.	3.00	5.27	4.27
Nov.	2.75	5.00	4.00
Dec.	4.36	3.48	2.48
1925			
Jan.	6.58	4.80	3.80
Feb.	5.13	4.58	3.58
Mar.	4.59	3.84	2.84
Apr.	4.41	3.82	2.82
May	4.00	3.74	2.74
June	3.12	3.36	2.36
July	2.53	4.60	3.60
Aug.	2.03	4.20	3.20
Sept.	1.78	4.78	3.78
Oct.	3.30	5.36	4.36
Nov.	4.47	5.73	4.73
Dec.	3.78	3.93	2.93
1926			
Jan.	5.53	4.10	3.10
Feb.	5.07	4.22	3.22
Mar.	5.38	4.60	3.60
Apr.	5.72	5.02	4.02
May	3.94	3.65	2.65
June	3.25	3.42	2.42
July	3.02	4.80	3.80
Aug.	4.53	5.37	4.37
Sept.	3.32	5.48	4.48
Oct.	2.52	5.15	4.15
Nov.	4.16	5.54	4.54
Dec.	7.00	6.33	5.33

duced on navigation in any navigable water of the United States wherever located.

Mr. Barker, testifying as to operations other than for the production of continuous power, did say they would reduce the channel depths of the Hiwassee River below Charleston, Tennessee, to less than three feet. He did not tell the Commission, however, that the Chickamauga Dam, which had been under construction then for three years, having been started January 13, 1936 (Res. Ex. 254,

(1) Month	(2) Navigable depths corresponding to natural flow of River from mouth of Hiwassee River to Charleston, Tenn. (Feet)	Navigable depths based on flow of River as regulated by operation of Respondent's developments to produce Saluda type super primary power (3) Mouth of Hiwassee River to Charleston, Tenn. (Feet)	(4) Charleston, Tenn. to Savannah Ford (— 1 ft.) (Feet)
1927			
Jan.	5.48	4.70	3.70
Feb.	6.72	5.54	4.54
Mar.	7.00	6.04	5.04
Apr.	6.17	5.18	4.18
May	4.57	4.07	3.07
June	5.10	4.44	3.44
July	4.22	5.20	4.20
Aug.	4.03	4.98	3.98
Sept.	3.22	5.25	4.25
Oct.	2.88	5.27	4.27
Nov.	3.60	5.35	4.35
Dec.	6.13	4.25	3.25
1928			
Jan.	5.50	4.65	3.65
Feb.	5.20	4.40	3.40
Mar.	6.47	4.97	3.97
Apr.	7.00	5.77	4.77
May	6.62	5.28	4.28
June	6.41	5.50	4.50
July	6.14	6.32	5.32
Aug.	5.37	5.54	4.54
Sept.	6.70	6.92	5.92
Oct.	4.47	5.87	4.87
Nov.	4.42	5.77	4.77
Dec.	3.97	3.45	2.45
1929			
Jan.	5.79	4.41	3.41
Feb.	6.38	4.97	3.97
Mar.			
Apr.	7.00	5.68	4.68

Rep. Charts Tab. 40, offered Comm. Tr. 1222) and was approaching completion, would, according to TVA reports to Congress, create a pool whereby a normal pool level would be maintained at elevation 682 feet above mean sea level (Res. Ex. 254, p. 447, Rep. Charts Tab. 40, offered Comm. Tr. 1220). He also failed to tell the Commission that the normal elevation of low water in the Hiwassee River at Charleston, Tennessee, is 667.6 feet (Res. Ex. 405, Rep. Charts 42, offered Comm. Tr. 5595). Accordingly, he did not inform the Commission that the Chickamauga Dam creates a reservoir having a normal pool level of 682 feet above sea level, which would raise the normal low water level in the Hiwassee River and produce a minimum slack water navigation depth at Charleston, Tennessee, of 18.2 feet and progressively greater minimum navigation depths between Charleston and the mouth of the Hiwassee River. He did not reveal that this pool will back the water up the Hiwassee River normally to a distance 13.4 miles above Charleston and to a point 2.2 miles below the mouth of the Ocoee River. He did not reveal that from the mouth of the Hiwassee to a point 2.2 miles below the mouth of the Ocoee River there would always be slack water navigation on the Hiwassee regardless of the type of operations of Respondent.

Naturally, when these facts were presented, the Commission, realizing that long before Respondent's development could be completed, the Chickamauga Dam would provide a navigation nowhere less than three feet in the Hiwassee River between Charleston and the mouth of the Ocoee River, was not impressed with Mr. Barker's testimony.

Moreover, as pointed out above, Respondent introduced evidence to show that even if the Chickamauga Dam had not been built, the operation of Respondent's developments to produce Saluda type super primary power would not have had any adverse effect on navigation. It is perfectly obvious that in the operation of Respondent's multiple-dam project, in which four related developments, each containing large water storage, are located one above the other (Res. Exs. 17, 203, Rep. Charts Tabs. 2, 4, offered Comm. Tr. 156, R. 75), it is the manner in which water is released from the dam lowest on the river that determines the effect of the operation of the development on the navigable waters below. It is also plain that under Respondent's Saluda type operation, where the customer takes about 30% of the energy contracted for at a constant daily rate, it is most economical to generate this energy as far as possible at the dam of lowest hydraulic head, thereby making it possible to operate that dam at nearly 100% load factor. Respondent's dam of lowest head would have been at Appalachia, which would also have been the lowest dam of the stream.

The result of this is to level out the flow of the river below and necessarily improve navigation in the navigable portion of the stream (Res. Ex. R. 404, Rep. Charts Tab. 41, offered Comm. Tr. 5592).

The three tribunals below had all of this evidence before them when they made their concurrent findings that Respondent's property had water power value. They were all aware of the principle that the operator of a water power project even on a non-navigable stream cannot adopt a form of operation which would have a substantially ad-

verse effect upon navigation below. Accordingly, their finding of value necessarily is a finding of fact that Respondent's development could be successfully operated without any adverse effect upon navigation.

(2)

The Evidence Demonstrated That Respondent Could Have Acquired All of The Necessary Lands.

Despite the findings of the three tribunals below, Petitioner once more claims that there was no reasonable probability that Respondent could acquire the remaining lands necessary for its development. Petitioner relies upon the fact that there were certain tracts of land which it contended were beyond Respondent's power of eminent domain (Pet. Br. 75, Footnote 40). Although Respondent conceives that this is a pure question of fact and that the concurrent findings below are conclusive upon this point, we will briefly indicate the substantial testimony which was before the three courts in each instance to show the reasonable probability of the acquisition of each parcel in question.

As to Indian Lands.

These lands were owned by the Eastern Band of Cherokee Indians, which is a North Carolina Corporation (Pet. Ex. 3-Q). It is true that the Government holds these lands in trust for the benefit of the Indians, but there is nothing to show that the lands could not have been purchased for a fair price. Mr. Powelson testified that in his opinion he could acquire the 72 acres in question, which have only a small market value based upon their value for agricultural purposes, at not more than twice their market

value and in any event at less than the additional cost to build the development without flooding the land (R. 760).

Moreover, Respondent introduced evidence, which was uncontradicted, showing that by the use of small subsidiary earth dams and pumping stations the development could be made without flooding the Indian land (R. 760). This would have cost $568,100 and would increase the cost of generation of power by .04 of a mill per kilowatt hour (R. 760). Accordingly, no real obstacle to the development was here presented.

The Andrews Plant.

Respondent testified that he had an understanding with Mr. Thorpe, President of the Nantahala Power Co. that it would sell that plant at any time at a reasonable price (R. 264). Mr. Thorpe testified that his Company would not in any way create a nuisance value, and that he would negotiate on a fair price (Dist. Ct. Tr. 355). In his financial statement. Mr. Powelson included an item of $300,000 for the purchase of the plant and this figure was adopted as being reasonable by both Dr. Waddell and Mr. White, both witnesses of Petitioner (Pet. Ex. 2-S; R. 700).

As to the Tennessee & North Carolina Railway.

Respondent called the President of the Tennessee & North Carolina Railway to testify on this point, and he testified in substance that this was an old dilapidated piece of railroad property, carrying no passengers, having two engines, five or six cattle cars, a caboose and two hand cars, operating at a loss (Comm. Tr. 2258-2261). He stated that the stockholders he represented would favor a sale of the

whole railroad for $100,000 and he thought the other stockholders would follow his recommendation to sell at that price (Comm. Tr. 2260-2262). In his financial statement Respondent included an item of $100,000 for this road, and both of Petitioner's witnesses, Dr. Waddell and Mr. White fixed the same figure as reasonable (Pet. Ex. 2-S; R. 700).

Lands in Tennessee.

If Respondent had built its Appalachia Dam at the lower of its two Appalachia dam sites, it would have had to acquire some lands in Tennessee by purchase. If such lands could not have been acquired by voluntary purchase at a reasonable figure, it could have built the dam a mile further up the River near where TVA is now building its Applachia Dam; in that event all the lands that would be flooded were owned by Respondent and were in the State of North Carolina (R. 184; Res. Ex. 8, Rep. Charts Tab. 1, offered R. 37).

Lands in Georgia.

Petitioner claims Respondent could not acquire necessary lands in Georgia, since it lacked the power of eminent domain there (Pet. Br. 75). Petitioner ignores the fact that through its wholly owned subsidiary the Union Power Company, Respondent already owned the strategic site for the Nottely Dam as well as a good deal of the land totalling some 4,500 acres necessary for the reservoir (Res. Ex. 8, Rep. Charts Tab. 1, offered R. 37). Petitioner likewise ignores that the Union Power Company had the power of eminent domain by virtue of which Respondent could have acquired the remaining lands (Stipulation of August 6, 1941; Res. Ex. 19, offered Comm. Tr. 221).

Land of the State of North Carolina.

Respondent contends that it does not appear from the record that the State of North Carolina had any interest in any property necessary for Respondent's development. This is confirmed, as far as the land condemned in this action is concerned, by Special Master Barnard's report which considers and passes on all claims of third parties and which fails to disclose any claim by the State of North Carolina and therefore no allowance to it of any interest in any of the condemned land. (The report of Special Master filed with Clerk of this Court under stipulation.)

Miscellaneous Tracts.

Petitioner also states that there is grave doubt that Respondent's power of eminent domain applies to various bits of property such as cemeteries, schools and churches, roads and other miscellaneous tracts. (Pet. Br. 75.) In this connection it is instructive to consider the testimony of Petitioner's witness, Snyder, who testified that Petitioner had acquired virtually all of the remaining tracts of land in the Powelson Reservoir, other than those owned by Respondent, *by voluntary negotiation*, and not by condemnation. (R. 641.) Of these tracts four were church properties which were secured without any peculiar difficulty (R. 654); two were public school properties again acquired by voluntary purchase without difficulty (R. 655); two were cemeteries (R. 655); one was acquired from the Town of Murphy (R. 655); and another from a County Board of Education (R. 656).

Respondent submits that the success of these voluntary negotiations cannot be ascribed to any peculiar persuasive-

ness known to Petitioner alone. Upon the contrary, as Respondent pointed out in his testimony, such problems are always met in every hydro-electric development of any size and invariably are solved without undue difficulty (R. 273-275).

It is therefore submitted that the concurrent finding of fact of the three tribunals below that there was a reasonable probability that Respondent could develop its property commercially for water power purposes within the reasonably near future is sustained by substantial testimony and should be accepted here as conclusive.

V.

There is legally sufficient evidence to support the award.*

At different points in its brief Petitioner has made attacks upon the competency of various types of evidence which were presented to the Court. These attacks center chiefly upon the following: (1) The evidence offered as to Respondent's plans for the development (Pet. Br. 43 *et*

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* Petitioner states in its brief (p. 10) "Respondent introduced no evidence as to the market value of the property but relied solely upon the foregoing computations". This statement is erroneous. See, for example, the testimony of the witness Bevan, referring to lands in Powelson Reservoir *only* (R. 496-497):

> "Q. Mr. Bevan, what, in your opinion, was *the estimated fair market value on January 28, 1936*, of the Powelson or Fowler Bend site, and the lands owned by the Southern States Power Company that would be flooded by the building of a 245-foot dam, assuming that waters would flow into the Powelson reservoir, as they would flow if the Murphy and Nottely projects were built and in operation, and *taking into consideration all the uses and purposes for which that property was then adapted or to which it might reasonably be applied, including the best and most available use to which it could be put?*
>
> * * * *
>
> "A. $4,000,000."

seq.). (2) Estimates of value based on such plans and their possibilities of commercial success (Pet. Br. 43). (3) Consideration of prices paid by the Government for other lands (Pet. Br. 84). (4) Consideration of water power value based upon the combination of lands effected by eminent domain (Pet. Br. 74-79).

A.

Evidence As to Respondent's Proposed Plan for the Development of Water Power Was Admissible.

The problem which was presented to Respondent at the inception of this case was how to bring properly before the Court by competent evidence the unquestioned water power value of this land.

It is recognized that in the ordinary case the value of any given tract of land is proven by evidence of its market value, which is established by testimony as to the purchase, and sale of other similar lands, in the same general locality, bought within relatively the same period of time. The fact of the matter is, however, that large hydroelectric sites are not bought and sold in such a manner as to create any available market or market value. In any event each site is of such an individual nature that it does not afford any sound basis for comparison with other hydroelectric sites.

Since the ordinary measure of the market value of Respondent's land was lacking, it was necessary for Respondent to present evidence of such facts which "in fair negotiations" for the sale of said property "between an owner willing to sell and a purchaser desiring to buy fairly might

be brought forward and reasonably be given substantial weight in such bargaining." This procedure has been recognized as valid in many cases. *Olson* v. *United States*, 292 U. S. 246 (1934); *McCandless* v. *United States*, 298 U. S. 342 (1936); *Ford Hydro-Electric Co.* v. *Neely*, 13 Fed. 2nd 361 (C. C. A. 7th, 1926) *cert. den.* 273 U. S. 723 (1926); *Rarck* v. *City of Cedar Rapids*, 134 Iowa 563 (1907); *Brainerd* v. *State*, 74 Misc. 100, 131 N. Y. S. 221 (Ct. Claims 1911); *Spring Valley Waterworks Co.* v. *Drinkhouse*, 92 Cal. 528 (1891); *Snouffer* v. *Chicago & N. W. Ry. Co.*, 105 Iowa 681 (1898); *Johnson* v. *Freeport & Mississippi River Railway Co.*, 111 Ill. 413 (1884); *Little Rock Junction Ry.* v. *Woodruff*, 49 Ark. 381 (1887); *Shenango & Alleghany R. R. Co.* v. *Braham*, 79 Pa. 447 (1875).

In one of the leading cases on this point, *Olson* v. *United States*, 292 U. S. 246 (1934), where a similar question of valuation arose with reference to the determination of the worth of certain flowage easements, the Court there held (292 U. S. 257):

> "Flowage easements upon these lands were not currently bought or sold to such an extent as to establish prevailing prices, at or as of the time of the expropriation. As that measure (*United States* v. *New River Collieries*, 262 U. S. 341, 344) is lacking the market value must be estimated."

The Court then set up the standard for the determination of value, holding (292 U. S. 257).

> "In respect of each item of property that value may be deemed to be the sum which, considering all the circumstances, could have been obtained for it; that is the amount that in all probability would have been arrived at *by fair negotiations between an*

owner willing to sell and a purchaser desiring to buy. In making that estimate there should be taken into account all considerations that fairly might be brought forward and reasonably be given substantial weight in such bargaining.''

With this principle as its guide, Respondent undertook in the Court below to present evidence which it believes, as a matter of economic fact, would have been produced in negotiations between the owner and the prospective purchaser of property such as was here involved.

Respondent's proposed plans for the development of this project were of no particular concern to anyone as *plans,* but insofar as they revealed the power possibilities of this project which would be available to *any* purchaser they were highly evidential and competent. Indeed, this distinction was noted by the District Court when in referring to all of this testimony, it held (R. 1054): "This testimony relates to the *adaptability* of the property in question for use as a site of an integrated hydroelectric power system and *its effect is limited to said question.''*

Respondent showed the physical properties of the land and its suitability and adaptability for dams and reservoirs. Respondent might have been content with stopping there and asking "expert" opinions as to value on this basis, but on such a basis an "expert opinion" might not have carried conviction. Respondent, therefore, assumed the burden of showing in detail the cost of constructing the dams and powerhouses, the cost of machinery, the types and amounts of power that could be produced, the fixed charges, the prices that would be obtained and the profitable

character of the enterprise. Respondent introduced this testimony on the theory that they were matters a prospective purchaser would be interested in, and it was these facts and details which Respondent's experts took into consideration when they finally gave their opinions as to value.

Although Petitioner bitterly contests this method of arriving at an opinion as to value, the testimony of its own experts indicate that there is no other way to compute water power value. Mr. Ayres, one of the TVA witnesses, testified on cross-examination as follows (R. 696):

> "Q. In your opinion, is it a sound or unsound way to determine the commercial feasibility of a project, to estimate the amount of output, the cost of development, the amount of income, and the amount of annual charges, and thereby arrive at some figure as to whether you would have a net income or surplus; is that a sound way to go about it, Mr. Ayres? A. *That is the only way I know to go about it.*"

On direct examination, Petitioner's witness, Dr. Waddell enunciated the same principle (R. 697):

> "Q. Now, Doctor, in determining the commercial feasibility of a piece of land like this for water power development, what major factors—what must be considered? A. I should say first the output, K.W. hour output, as we call it, the income, the market and the cost of development must be the four principal factors."

The most detailed statement of the same rule was made on direct examination by Mr. Uhl* on whom Petitioner relied very heavily.

There is ample legal precedent for the reception of this type of evidence. The case of *Ford Hydro-Electric Co.* v. *Neely*, 13 Fed. 2d 361 (C. C. A. 7th, 1926), *cert. den.* 273 U. S. 723 (1926), presents a very close precedent. In this case, the court was dealing with the valuation of land condemned for water power purposes. It appears from the record that the trial court had admitted evidence of an expert as to (1) the amount of power that would be available, (2) the value of the power per kilowatt hour, (3) probable expense of transmission, (4) the production expense, (5) maintenance, (6) taxes, (7) depreciation and finally (8) surplus that would be available after deducting such expenses.

The Circuit Court of Appeals held that this evidence was competent and had been properly received, saying (13 F. 2d 362):

> "The evidence objected to threw light upon the availability of the land for water power purposes

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* "Q. Now, Mr. Uhl, what are the principal points to be considered in the determination of market value of riparian lands for water rights (power)?
"A. *First*, I would say the market price for power and its extent, and its distance from the city (site).
Second, I would say competitive sources of power.
Third, the extent of engineering information available regarding the site.
Fourth, the natural advantages and disadvantages of the site.
Fifth, the probable cost of construction.
Sixth, the pondage and storage possibilities.
Seventh, the stream flow characteristics.
Eighth, the time when the development may be carried on.
Ninth, the possibilities of financing.
Tenth, the yearly cost of producing the estimated output.
"Q. Now does that complete it?
"A. In my opinion those are the principal points to be considered."

and the value of such element, has bearing upon what might be paid for it by one desiring to purchase it, and thus bore upon its market value. *By objecting to this evidence, plaintiff in error sought to exclude it altogether. As remarked by the trial judge, the objection went rather to the weight to be given the evidence then to its competency. The availability of the land for the development of water power, and the value of it for such purposes, was a proper element to be considered by the jury in fixing its market value.*"

In *Weiser Valley Land & Water Co.* v. *Ryan*, 190 Fed. 417 (C. C. A. 9th, 1911), upon a condemnation of land for reservoir purposes, defendants' expert testified among other things that he could build a dam for $200,000; that the distributing works would cost $500,000; that the water could be sold at $50 per acre; that a profit could be made and, that, according, in his opinion the land was worth $30,000.

The testimony was objected to upon the ground that it was speculative and did not afford a certain and substantial basis upon which to determine market value. After a careful review of the authorities, the court concluded that the testimony was admissible and that the objection went only to the weight that could be given to the evidence. The court held (190 Fed. 423):

> "It would seem that the testimony admitted, accompanied as it was by the careful admonition of the witnesses by the court respecting the exact question to be answered, was not objectionable under the rule. Many things were taken into consideration by the witnesses pertaining to the irrigation project of the plaintiff—the cost of the land to be util-

ized, cost of construction and maintenance, the feasibility of utilizing the water, the prospective amount available, the lands available for irrigation, the value of those lands, and the value of the water furnished, and perhaps anticipated profits, all entering into account as forming the basis for judgment as to the value of the land sought to be appropriated."

In *United States* v. *Chandler-Dunbar Water Power Co.*, 229 U. S. 53 (1913), where the Government was condemning certain lands bordering on the St. Mary's River, it appears from the record on appeal that the trial court admitted evidence on the question of value of the "raw water" as follows: the velocity of the river flow, the fall of the river, the mean discharge, the hydraulic head available, the amount of power that would be developed, the cost of development, the operating expenses, the use to which the power could be put, the value per horsepower and the profit that would be realized. Upon appeal this Court did not question the admissibility of such evidence, but the award was set aside because it was held that the company did not have a private property interest in the water power of the river.

In *Niagara Lockport & Ontario Power Co.* v. *Horton*, 231 App. Div. 402; 247 N. Y. S. 761 (1931), the court was dealing with the valuation of land being condemned for water power development. The Commissioners admitted evidence of an expert as to the market value of the property arrived at by determining the cost to build the plant, the amount of power available, the losses through the turbines, the price at which it could be sold, the annual operating expenses and the annual net surplus. After hearing this testimony, the Commissioners struck it all out, but upon appeal the court held this was error.

The basic principle is well stated by Wiel on *Water Rights in the Western States,* (3rd ed.) Sec. 1305, as follows:

> "Great distributing plants are so rarely sold that there is no such standard of measurement. There is no open market for such things. The only way in figuring in money the value of a thing having no sale market, and in its nature fixed and permanently bound within its surroundings, is upon the money return which it brings in, comparing that return with the return received from things which do have a market value."

It is, therefore, submitted that the evidence submitted by Respondent as to its proposed plan for the development of the water power in this project was admissible insofar as it disclosed the true power possibilities of the development.

B.

Evidence of Profits Was Properly Admitted.

Many of the authorities cited under the preceding point are applicable in sustaining Respondent's position that evidence of potential profits are admissible, but further consideration will be specifically given to that issue. Just as Respondent noted that evidence as to its plans of development was not introduced as mere *plans,* but merely as affording a convenient vehicle to display the power potentialities of its property, so evidence of profits was introduced, not as the basis upon which an award would be made to Respondent for *loss of profits* or business, but rather as a basis to enable a prospective purchaser, an expert, or a

judge, to arrive at some reasonable estimation of the true water power value of the property.

It is firmly established in the law that income from property in the way of rents and profits is an element to be considered in arriving at the market value or measure of compensation to be paid for taking property in condemnation proceedings. *Montgomery County* v. *Schuylkill Bridge Co.*, 110 Pa. 54 (1885); *Brainerd* v. *State*, 74 N. Y. Misc. 100, 131 N. Y. S. 221 (Ct. Claims 1911); *City of Chicago* v. *Lehmann*, 262 Ill. 468 (1914); *Weiser Valley Land & Water Co.* v. *Ryan*, 190 Fed. 417 (C. C. A. 9th 1911).

A very important case in this field is *Brainerd* v. *State*, 131 N. Y. S. 221 (Ct. Claims, 1911), wherein the court, speaking with regard to profits and whether they could be considered a measure of value, held (131 N. Y. S. 229):

> "Whether or not profits should be considered depends upon the nature of the premises taken. Where the personal skill, experience, and efforts of the owner play too prominent a part, the profits realized from the business conducted upon real property constitute but little aid in determining the value of the property, *but, where the earnings depend chiefly upon the location, soil, or character of the property itself, the profits derived from it may furnish reliable evidence of its value.*"

It is highly significant that the entire emphasis is placed on the *weight* of the evidence, and not on the admissibility thereof. At this point reference is made to *Ford Hydro-Electric Co.* v. *Neely*, 13 F. 2d 361 (C. C. A. 7th, 1926) *cert. den.* 273 U. S. 723 (1926) (*supra*, p. 77) and in particular to the last factor that was discussed therein, *i. e.*, "the sur-

plus that would be available after deducting such expense". By holding this evidence admissible, the court adhered to the well established rule that income is a vital factor in estimating market value and clearly admissible as such.

It is abundantly clear that the profits in the instant case are dependent upon "the character of the property itself" and that a prudent man would take such profits into account in forming a judgment as to the market value of this property.

Again, in *Weiser Valley Land & Water Co.* v. *Ryan*, 190 Fed. 417 (C. C. A. 9th, 1911) (*supra*, p. 78), the court held that it was proper to admit testimony on a variety of facts bearing on value, including *prospective profits*, saying (190 Fed. 423):

> "Many things were taken into consideration by the witnesses pertaining to the irrigation project of the plaintiff—the cost of the land to be utilized, cost of construction and maintenance, the feasibility of utilizing the water, the prospective amount available, the lands available for irrigation, the value of those lands, and the value of the water furnished, and perhaps anticipated profits, all entering into account as forming the basis for judgment as to the value of the land sought to be appropriated."

The case of *City of Chicago* v. *Lehmann*, 262 Ill. 468, (1914) dealt with the value of certain vacant land that was being condemned. It appeared in evidence that in the normal course of events it would be used for the erection of flat buildings thereon. Accordingly the court held that it was competent to show the probable future income that would be derived by way of rents. The court held that in

order to test the weight to be given to the opinion of witnesses as to value (262 Ill. 473):

> *"• • • it was competent to show the income that would be derived from the property on their theory, since it appeared from the testimony of the witnesses, as well as from common experience, that values are largely controlled by income."*

To the same effect is *State* v. *Suffield & T. Bridge Co.*, 82 Conn. 460 (1909), wherein the court held (82 Conn. 468):

> "A purchaser in the market for it will not only look to the present and past income from it, *but will inquire as to its future prospects.*"

Petitioner has completely avoided this fundamental principle of valuation and has selected as the keystone of his entire argument on this point the case of *United Gas Co.* v. *Railroad Comm.*, 278 U. S. 300 (1929). But it is submitted that the *United Gas Co.* case is clearly distinguishable from the case at bar. In the first place, the type of the proceeding and the evidence offered were different. That case involved the valuation of certain gas property in order to determine rates. There were offered estimates of engineers which were based on the assumption that gas would be found under the acreage in specified amounts, but such estimates were of necessity highly conjectural. On the other hand, in the instant case, the amount of potential water power was admittedly a fact not subject to dispute. It is submitted, therefore, that in the *United Gas Co.* case the difficulties of measurement were inherent in the subject matter and that the rule applied there should not be used where, as here, the water power is capable of accurate measurement. Finally, it should be noted that the landowner was offering evidence

of potential profits as direct proof of value rather than as one of the factors to be considered in estimating the value of the property.

This same question was before this Court in *United States* v. *Chandler-Dunbar Water Power Co.*, 229 U. S. 53 (1913) (*supra*, p. 79), where the Government was condemning certain dams and dikes of the condemnee-company. The company claimed that it was entitled to compensation for the undeveloped water power. The company was awarded $550,000 by the trial court as compensation for these raw water rights. Evidence was admitted as to the various factors governing power and marketability and, after considering them, *the lower Court arrived at the value by capitalizing such profits.*

On appeal the Supreme Court denied the condemnee's right to water power, since the river in question was navigable. But even though the "principles adopted by the district court for the valuation for the upland taken" were assigned as error, it did not question the admissibility of the foregoing evidence.

It is submitted, therefore, that evidence as to profits was properly admitted as a vital factor bearing on market value; that such evidence is not, as Petitioner claims, by its very nature unreliable; that all of Petitioner's objections are in reality objections going to the weight and not to the competency of the testimony and that accordingly the evidence was properly received. It is obvious that none of the three courts below relied on profits as such, or they would necessarily have arrived at far greater figures. But there can be no doubt as to what the Circuit Court of Appeals did:

> "As the experts of Respondent placed an excessive value on the property for power purposes and the experts of the Petitioner placed no value at all on it for such purposes, the court below was not bound to accept the estimates of either but was called upon to exercise its best judgment as to value on the basis of all the facts in evidence * * *" (R. 1077).

In any event, there is an abundance of evidence in the record, other than that complained of, to support the award; and even if it were admitted that the evidence in question was incompetent—which it is not—the presumption is that the Court (when the trial was without the intervention of a jury) acted only upon the competent evidence. *United States* v. *King*, 7 Howard, 833, (854, 855) (1848); *Sinclair* v. *United States*, 279 U. S. 749, (767) (1929); *Topolewski* v. *State*, 130 Wis. 244 (1906); *Davis* v. *Seattle*, 134 Wash. 1 (1925).

C.

Consideration of Prices Paid for Other Lands.

It is urged by Petitioner (Pet. Br. 84 *et seq.*) that the lower tribunals erred in accepting in evidence certain prices paid by the Government for other lands needed for the same project. To this contention the answer is clear.

In the first place, Petitioner, in making this objection, is in the position of citing as error the admission of testimony offered by itself. This evidence of prices paid for other lands by the Government was given by two witnesses: J. I. Snyder, Chief of the Land Acquisition De-

partment of the Tennessee Valley Authority (R. 635 *et seq.*) and Ned H. Sayford, Head of the Maps and Surveys Division of the Tennessee Valley Authority (R. 897 *et seq.*).

Petitioner has also stated that all of this evidence as to other prices was admitted over its objection and at the "insistence" of the Commission (Pet. Br. 12). Analysis of the sections of the Record cited by Petitioner to support its position, rather than sustaining Petitioner, clearly demonstrates that while the Commission showed an interest in these prices, it did not at any time insist upon their introduction into evidence. As a matter of fact, Petitioner at all times expressed complete willingness to place the list in evidence:

> "Mr. Marks: * * * we are perfectly willing to go along with Mr. Snyder's testimony provided the Commission will grant us that privilege of deciding afterwards whether to put on the other witnesses." (R. 639-640.)

Immediately thereafter when the list was actually produced, the Commissioners clearly indicated to the Petitioner that it could be withheld without prejudice. Here again Petitioner reiterated its willingness to put the list in evidence:

> "Chairman Mull: The situation is now before the Petitioner. We will let you pass on it, whether you want to introduce it or whether you do not, without prejudice.
>
> "Mr. Fowler: We are perfectly willing to put it in * * *." (R. 640.)

This clearly disposes of any contention that the Commission forced the introduction of this list into evidence.

And in any event, while Petitioner in his Brief asserts that the courts below erroneously relied upon *prices* allegedly paid by the Government for other lands needed for the same project (Pet, Br. 84, *et seq.*), a careful examination of the record reveals that the list was in fact an *appraisal* list (R. 638, 639), not a list of prices actually paid. And this was the very reason that Respondent objected to the admission of this testimony (R. 641).

It is submitted, therefore, that Petitioner is not now in a position to object to the admission before the lower tribunals of testimony given by its own witnesses and that any contention that the Commission forced the introduction of this evidence is wholly without support in the Record (R. 640).

D.

Consideration of Water Power Value Based Upon the Combination of Lands Through the Use of Eminent Domain.

Petitioner has again argued that Respondent is not entitled to the water power value of its lands; because it can only realize that water power by combination with other lands which it would have to acquire by condemnation (Pet. Br. 76).

In this connection Petitioner places great stress upon *McGovern* v. *New York*, 229 U. S. 363 (1913) and *New York* v. *Sage*, 239 U. S. 57 (1915). In each of these cases it was held that where a private person owned lands which by themselves had no value as a reservoir, he could not claim a reservoir value based upon the combination of his lands with those owned by others unless there was a reasonable probability shown of effecting the union. In each case the

Court indicated that a union effected by the condemnor under a power of eminent domain could not be considered. In neither case, however, did the landowner have a power of eminent domain, and, accordingly, it is clear that the cases were merely ruling out of consideration the combination that could not be effected by the condemnee. These cases, accordingly, can have no application to Respondent, who admittedly had the power of eminent domain.

The only question in these cases is whether the landowner whose property is being taken had any reasonable chance of effecting a combination of the lands,—the means is unimportant. This basic consideration was indicated by Mr. Justice Holmes in *McGovern* v. *New York*, 229 U. S. 363 (1913) where he said (229 U. S. 372):

> "The plaintiff in error was entitled to be paid only for what was taken from him as the titles stood, *and could not add to the value by the hypothetical possibility of a change unless that possibility was considerable enough to be a practical consideration and actually to influence prices* (citations omitted). In estimating that probability the power of effecting the change by eminent domain must be left out."

He further said (229 U. S. 372):

> "There are said to have been hundreds of titles to different parcels of that land. If the parcels were not brought together by a taking under eminent domain, the chance of their being united by agreement or purchase in such a way as to be available well might be regarded as too remote and speculative to have any legitimate effect upon the valuation."

In *City of New York* v. *Sage*, 239 U. S. 57 (1915) this Court had occasion to consider a similar case with reference to the same reservoir. Again, Mr. Justice Holmes recognized that the adaptability of the land to the purposes for which the land could be used most profitably was to be considered, but he held (239 U. S. 61):

> "But it is to be considered only so far as the public would have considered it if the land had been offered for sale in the absence of the city's exercise of the power of eminent domain. * * * The city is not to be made to pay for any part of what it has added to the land by thus uniting with other lots, if that union would not have been practicable or have been attempted except by the intervention of eminent domain."

Again it is apparent, in view of the fact that the landowner in question did not have the power of eminent domain, that the court was denying the owner recovery for value dependent upon a combination of lands which the owner could not reasonably expect to effect. In making this point, the Court emphasized that the city's right of eminent domain could not be used by the private landowner as the basis of an argument that the combination could be effected so as to entitle him to value.

In *Medina Valley Irrigation Co.* v. *Seekatz*, 237 Fed. 805 (C. C. A. 5th, 1916), an action was brought to condemn lands which the owner claimed could be used with those of other proprietors for reservoir purposes. Again it was perfectly clear that the landowner had no power of eminent domain. The court held (237 Fed. 807):

> "The admission in evidence of such estimates of value involved the hypothesis that the defendant

was entitled to the value which was added to his land by the condemnation of it, together with other lands, in behalf of another. Such estimates were based upon a consideration of contingencies which were too remote and speculative to have any legitimate effect upon the valuation of the land as it was owned by the defendant, and the admission of evidence of them involved the unwarranted assumption that the defendant was entitled to share in an enhancement of value resulting from an exercise of the power of eminent domain."

Accordingly, it is apparent that in all of these cases the courts were focusing their attention upon the fact that the owner of the land in question did not have any reasonable probability of successfully combining his land with that owned by other parties, and in every case the court was emphasizing that the mere fact that the condemnor had the power of combining the lands did not create any proof that there was a reasonable probability of combining the lands as far as the private landowner was concerned. These cases cannot be considered as having any controlling effect where there is shown a reasonable probability that the landowner can effect a successful combination of lands by use of the power of eminent domain or otherwise.

Petitioner has also suggested that when the State of North Carolina conferred the power of eminent domain upon Respondent, it conferred a special privilege by reason of which he can reap no personal benefit (Pet. Br. 76-77). Petitioner chooses to ignore the fact that although the total award made in this case was only $976,289.40, Respondent, relying upon its right of eminent domain, has invested the sum of $1,061,942.52 (Res. Ex. 187, Comm. Tr. 731) of which Mr. Powelson has personally contributed the sum of

$586,196.21 (R. 185). Petitioner further ignores that this right of eminent domain and the water power rights which it enabled Respondent to acquire were acquired under and by virtue of the laws of the State of North Carolina, and that Respondent is here being deprived of such right, not by that State, but by a different sovereignty.

There can be no doubt that the solution of this problem is governed by the law of the State of North Carolina, and it is submitted that under the laws of that State a landowner is entitled to compensation for water power value, even though the necessary combination of lands can only be effected by the power of eminent domain. In *Nantahala Power & Light Co.* v. *Moss*, 17 S. E. (Adv. Op.) (2d) 10 (1941), the court was considering an action brought by a power company to condemn the right to divert waters from the lands of the respondents. In considering an exception directed to the admission of evidence offered for the purpose of showing that an independent water power project was available by uniting the lands of respondent with adjacent lands owned by other parties, the court held (17 S. E. (Adv. Op.) (2d) 15):

> "Before valuations can be considered as a basis for awarding damages under the theory that the numerous tracts of land may be brought together and used as one tract in a development, it must be shown that there is a reasonable probability of the unification of the tracts of land involved and that it is feasible and practicable to combine them in the one ownership *either by condemnation proceedings* or by agreement, and such evidence should not be submitted to the jury under any circumstances when it appears that such unity is impractical or impossible."

The court cites several times the opinion of Judge Parker in this case (118 Fed. 2d 79) with approval. Justice Clarkson, who concurred in a separate opinion, held (17 S. E. (Adv. Op.) (2d) 17):

"The most recent decision, *which I think is directly in point*, is the case of *United States* v. *Powelson*, 4 Cir., 118 F. 2d 79. This was an opinion from this circuit, written by Judge Parker. Quoting from the Powelson opinion, Judge Parker says: at page 84 of 118 F. 2d: 'The fact that the most profitable use of a parcel can be made only in combination with other lands does not necessarily exclude that use from consideration if the possibility of combination is reasonably sufficient to affect market value. Nor does the fact that it may be or is being acquired by eminent domain negative consideration of availability for use in the public service. *New York* v. *Sage*, 239 U. S. 57, 61, 36 S. Ct. 25, 60 L. ed. 143. *It is common knowledge that public service corporations and others having that power frequently are actual or potential competitors not only for tracts held in single ownership, but also for rights of way, locations, sites, and other areas requiring the union of numerous parcels held by different owners. And, to the extent that probable demand by prospective purchasers or condemnors affects market value, it is to be taken into account. (Mississippi & R. River Boom Co.* v. *Patterson, ubi supra,)*' citing and quoting from *Olson* v. *United States, supra.*

"In North Carolina the principle above enumerated is stated in *Brown* v. *Power Co.*, 140 N. C. 333, 336, 52 S. E. 954, 3 L. R. A. N. S., 912 and *Madison County R. R.* v. *Gahagan*, 161 N. C. 190, 76 S. E. 696."

In view of this most recent expression of opinion of the highest court of the State of North Carolina expressly approving the principles enunciated by the lower courts in this very case, it is submitted that there can be no doubt that under the law of North Carolina, which is controlling here, Respondent is entitled to compensation for water power value which is realizable by a combination of lands through the use of its power of eminent domain.

VI.

The award of severance damages was proper.

As has already been shown under Point III hereof (*supra*, p. 39 *et seq.*) the chief value of Respondent's property arose out of its availability and adaptability for water power purposes. Each of the three tribunals below found that an integrated hydroelectric system as contemplated here by Respondent would be commercially successful and that accordingly Respondent's property had substantial water power value.

Although it is true that Respondent's lands were not all contiguous, it must be kept in mind that it had acquired and was holding its property for one purpose alone, an integrated hydroelectric development. Not only had Respondent acquired these lands for the sole purpose of developing the water power project, but thereafter he spent a great deal of time and money, all with one purpose, the development of an integrated hydroelectric system. The finding of the Commissioners on this point was most specific. They held (R. 774):

"We regard the lands of the Southern States Power Company that are the subject matter of this suit as one property and have found the value of same as a whole. Beginning in 1909 and continuing until January 28, 1936, the date of the beginning of this action for condemnation, the Southern States Power Company and its predecessors purchased the various tracts of land (approximately one hundred and forty tracts) in the basin of the Hiwassee River as the site of a contemplated hydro electric power plant. The necessary expense of acquiring said land was large. Also much and expensive engineering work was done on said land. More than ten thousand engineer's stakes were set in the ground and "hubs" were established and properly staked by which the topography of the land was established and marked on the ground and many contour lines were thus established and designated on the ground. That said engineering data and facts were thus properly established and marked on the ground on January 28, 1936, the date of the institution of this action. That years of work by trained engineers were required in doing said job and the information thus obtained and marked on the ground is necessary to ascertain the adaptability of the land in question for the site of a hydro electric generating plant."

Respondent not only produced evidence to show that the integrated development had value for water power purposes (*supra*, p. 39 *et seq.*), but also established beyond doubt that the taking by the Petitioner of the Powelson site completely destroyed the water power value of Respondent's remaining lands.

The taking of the Powelson site, and Petitioner's erection of the Hiwassee Dam there, with a head of 250 feet

rather than Powelson's 245 feet, results in the creation of a reservoir which floods out the Murphy site, destroying its usefulness. The first site farther up the river suitable for a dam would be Brasstown, but only a head of 144 feet would be available there. Moreover, Petitioner's taking at Powelson also included a strip of land which would have been flooded by the Appalachian reservoir. Accordingly, after Petitioner's taking, to avoid flooding the land taken, Respondent could no longer use a 110-foot head at Appalachia but at most an 89-foot head. None of these facts is subject to substantial dispute. Respondent's Exhibit 249 (Rep. Charts Tab. 22, offered R. 156) presents graphically the effect of Petitioner's taking upon Respondent's plan of development.

Respondent's Exhibit 223 (Rep. Charts Tab. 9, offered Comm. Tr. 1066) shows graphically that the great power possibilities of this four dam project were largely based upon its use as an integrated system under which each dam and powerhouse, by reason of the planned use of the stored waters, was rendered capable of producing a great deal more energy than it could without the aid of such waters.

Nevertheless Mr. Powelson and his staff spent a great deal of time in computing the power possibilities of the lands remaining after Petitioner's taking and established without contradiction that the remaining property could produce at most only 18,600 K. W. of continuous power (as compared with 67,000 K. W. of the original four plant system) and even this figure could only be achieved if the Government would permit unlimited storage at Brasstown and Nottely during seasons of large natural flow (R. 149-156; Res. Ex. 249, Rep. Charts Tab. 22, offered R. 156). It

was uncontradicted that, after the taking of lands by Petitioner, it would not have been commercially feasible to develop the remaining lands (R. 152).

Each of the three tribunals below have found concurrently as a fact that Petitioner's taking of the lands in question has destroyed the status of Respondent's property as the site of the four dam integrated hydroelectric power system and that what is left to the Respondent has been reduced to the status of farm lands and rough mountain acreage (R. 780, R. 1060, R. 1080).

The finding of the Commissioners is as picturesque as it is accurate (R. 780):

> "The status of the Respondent's remaining property is quite analogous to the status of an automobile after the motor is taken out. The part that is left would lose its classification as an automobile, and would be properly classified as a buggy. Likewise its value would be determined by its status as a buggy."

The District Court also found (R. 1060):

> "The status of all of said property as the site of four-dam integrated hydro-electric power system has been destroyed, and what is left the respondent, in its remnants of property not taken, has been reduced to the status of farm lands and rough mountain acreage."

Finally this finding was expressly concurred in by the Circuit Court of Appeals (R. 1080).

It is submitted that whether or not the taking has destroyed the actual water power value of the remaining

lands is a pure question of fact, and that, accordingly, in view of the substantial evidence referred to above, the findings of the three tribunals below should be considered conclusive upon this point. (See Point II, *supra*, p. 36.)

A.

Just compensation must be paid not only for lands taken, but for damages to remainder resulting from taking.

Petitioner has not attempted to deny the validity of the well-established doctrine of severance damages in condemnation cases (Br. 92). It contends, however, that severance damages can be allowed in the absence of physical contiguity only where the properties have already been developed for use together and are actually being so used at the time of the taking (Br. 92, 92). Respondent submits that the true rule as to severance damages cannot be restricted in this arbitrary manner. In any event it insists that the properties here involved were acquired and held for a single purpose.

Petitioner relies upon the case of *Essex Storage Electric Company, Inc.* v. *Victory Lumber Co.*, 93 Vt. 437 (1919) as its authority for the claim that severance damages are allowable in the absence of physical contiguity "only when the properties have already been developed for use together and *actually* are so used at the time one tract is condemned" (Pet. Br. 93, italics by Pet.). In that case the lumber company owned lands which it had been holding for logging purposes. These lands were a considerable distance from the lands condemned and were separated therefrom by intervening lands owned by third parties.

The court rejected the argument that damages might not be allowed since the lands were not contiguous, and awarded severance damages, holding (93 Vt. 446):

> "The plaintiff insists that the item of $10,500 on account of increased cost of cutting and marketing the hardwood standing on the east slope of the basin was improperly allowed. In discussing this claim, *we will assume that all of this hardwood was standing on land owned by the defendant but wholly separated from the land sought to be taken by lands owned by others.* The argument is that it is only contiguous lands that can be considered as one piece in the assessment of damages in condemnation cases, and, inasmuch as the hardwood does not stand on land contiguous to the land taken, nothing can be allowed for its depreciation. While there are cases apparently supporting this claim, and expressions are to be found in our own cases consistent with it, contiguity is not always the controlling question. Generally speaking, the rule contended for by the plaintiff affords a correct basis for the assessment of damages, but it does not in all cases. *Where two or more pieces of real estate, though separated even by an intervening fee, are used as one enterprise, and constitute fairly necessary and mutually dependent elements thereof, they are in the eye of the law a single parcel, and the taking of one necessitates payment for the injury to the others.* To state the proposition in its usual form, the damages in such cases are to be assessed by comparing the value of the whole enterprise before the taking with the value of what remains of it after the taking. This rule is recognized in the following cases (citing cases).

> "Such parcels can be considered as one only when they are so inseparably connected in the use to which they are devoted that the taking of one necessarily and permanently injures the other."

There, as here, the condemnor argued that it did not appear that the land owner was actually using the property in its logging business at the time of the taking, but the court held that this was entirely immaterial and would not prevent the land in question from being considered a necessary part of the common enterprise. It held (93 Vt. 448):

> "It is further argued that it is not found and did not appear that the defendant is now cutting any of the hardwood on the east side. But this fact, if it be such, would not of itself prevent the lands being considered a single parcel for the assessment. Operations on the hardwood on the east side generally may have been interrupted or postponed for one reason or another without affecting the defendant's right to damages, or prevent the east side from being a necessary part of the common enterprise."

It is therefore clear that this case does not set up the narrow rule contended for by Petitioner, but on the contrary it requires not actual use but merely the holding of the lands as a unit and as a necessary part of the common enterprise. This test is certainly met by Respondent in the present case in every respect.

An authority on all fours with the instant case is *Potts, et al.* v. *The Penn. S. V. R. Co.*, 119 Pa. 278 (1888). The court there limited damages to property actually condemned, although such property and non-contiguous land

were used in the same industry, but the court in recognizing that there might be other cases where such a holding might not be just, said (119 Pa. 285):

> "Peculiar and isolated cases may perhaps exist, also, where although the lands are not in fact contiguous, yet the uses to which they are applied, respectively, are in their nature so intimate and dependent, one upon the other, that an injury to one must necessarily be taken as an injury to the whole taken together; for example, *the land upon which a water mill is erected will ordinarily draw to it as an appurtenance, or rather will be regarded as embracing, the ground covered by the reservoir, so that the latter will be regarded as part and parcel of the former, although they are not contiguous.*"

This principle is well summarized after appropriate discussion in Lewis, Eminent Domain, (3rd ed.) as follows (p. 1208):

> "It is not a question of contiguity but if different farms or tracts are used together as one property or are adapted to such use and are more valuable because of such adaption, then they may be treated as one tract in the estimation of damages, otherwise not."

Again, in *Trustees of Boston University* v. *Commonwealth*, 286 Mass. 57 (Sup. Jud. Ct. Mass., 1934) the court had occasion to consider a similar problem. In that case the Trustees of the University were the owners of lands separated by various public streets, and the court found:

> "There was evidence that the entire property of the petitioner, at the time of the first taking, was

> adapted for use as the site of a university, for which purpose the jury could find it was held, and was not fit for that use afterwards. There was evidence that for that use, and for use for hospital buildings or apartment houses, for which the land of the petitioner east of Chilmark street was also adapted, the taking caused injury to that land."

After reviewing various authorities holding that severance damages could be allowed where property was non-contiguous if it was held as a unit, the court concluded:

> "Since the evidence justifies a finding that all the land of the petitioner in the neighborhood was held as a unit for a single purpose, and that each part was dependent on every other, it could not be ruled as matter of law, as the commonwealth requested, that it could not be treated as a single parcel in assessing damages. This result accords with many decisions in other states".

Petitioner suggests in a footnote (Pet. Br. 98) that since the title to the streets was in the Trustees subject only to the public easement the tracts were physically contiguous. The treatment of the case, however, by the court, and the authorities relied upon (e. g. *Essex Storage Electric Co.* v. *Victory Lumber Co.*, 93 Vt. 437 (1919) (*supra*, p. 97) indicate that the court clearly did not rest its decision on this narrow ground. The realistic approach of the court to the problem is well illustrated by its quotation from another Massachusetts case in which it concluded as follows:

> "In *Wellington* v. *Boston & Maine Railroad*, 164 Mass. 380-382, 41 N. E. 652, this court said, 'Whether a particular lot of land constitutes an independent

parcel is a question which cannot be determined in the affirmative by the mere fact that it is separated from other land by a highway or street, or by paper lines, or by fences; nor can it be determined in the negative by the mere fact that it is all in one ownership, and is not divided by streets or by paper lines.'"

In *Campbell* v. *United States*, 266 U. S. 368 (1924) condemnor had taken a part of plaintiff's land which was separated from the remainder by a public road. The question presented was whether plaintiff was entitled to damages to the remainder of his land, (1) by reason of the taking of the part of his land on the other side of the street, and (2) by reason of the condemnor's taking of third parties' lands. The lower courts allowed damages for the first but not the second, and on appeal this Court affirmed the judgment below. The decision holds, accordingly, that property may be considered as one parcel for purposes of condemnation although separated by a public road.

In *Sharp* v. *United States*, 191 U. S. 341 (1903), this Court considered a case in which the condemnor had condemned one of three separate and independent, although adjoining, farms or tracts of land owned by the plaintiff. The Commissioners had allowed in their award damages to the remaining tracts of land. From the record it appeared that the tracts were separated by a highway. The Court recognized that whether or not the three tracts were held as a single parcel was a question for the jury and upon this point quoted at length with approval from the opinion of Judge Gray, who had delivered the opinion in the Circuit Court of Appeals, as follows (191 U. S. 354):

"'Depreciation in the value of the residue of such a tract may properly be considered as allowable damages in adjusting the compensation to be given to the owner for the land taken. *It is often difficult, when part of the tract is taken, to determine what is a distinct and independent tract; but the character of the holding, and the distinction between the residue of a tract whose integrity is destroyed by the taking and what are merely other parcels or holdings of the same owner, must be kept in mind in the practical application of the requirement to render just compensation for property taken for public uses. How it is applied must largely depend upon the facts of the particular case and the sound discretion of the court.* All the testimony of this case tends to show the separateness of this tract which was the subject of the condemnation proceedings. It had never been farmed or used in connection with either of the other farms owned by the plaintiff in error. *It was in no way reasonably or substantially necessary to the enjoyment of the other two tracts.*'"

The proof in the present case is overwhelmingly to the effect that every bit of the property held by Respondent was "reasonably or substantially necessary to the enjoyment" of the remainder. Taken together all of Respondent's lands formed an integrated hydroelectric development; taken separately it was merely a collection of mountain, farm and timber land.

The three courts below have found concurrently as a fact that all of the land of Respondent was held by it as a unit in connection with its common enterprise. The opinion of the Circuit Court of Appeals deals with the basic principles. The Court held (R. 1080):

"It is argued that the severance or consequential damages as to the Appalchia, Murphy, and Nottley lands cannot be allowed because these lands are not contiguous to the lands taken. It is clear from the record, however, that they were acquired by respondent for the purposes of an integrated development to which they were necessary; and when that development was frustrated by the taking of the Powelson dam site and basin lands, the award of such damages was necessary to reimburse the owner for the damage sustained as a result of the taking. The case is unusual, but is analagous to that presented where a part only of a single tract of land is taken and recovery of resulting damage to the remainder is allowed. See *Grizzard* v. *United States*, 219 U. S. 180, 183; 18 A. J. 905; 20 C. J. 731. The controlling principle is that the owner is entitled to full compensation for the taking of his land and all its consequences. He is, of course, no more entitled to damages to an entirely separate and disconnected property than if the damages thereto had resulted from the taking of the property of another; but here the unitary character of respondent's projected enterprise bound the various tracts together for the purposes of applying the rule just as completely as if they had been embraced within one boundary, which, after all, is an entirely artificial thing. Respondent was entitled, upon the taking of a part of the lands acquired for that enterprise 'to have the just compensation safeguarded by the Fifth Amendment to the Constitution; that is the value of the land taken and damages inflicted by the taking—such a sum as would put him in as good a position pecuniarily as he would have been if his property had not been taken. *Campbell* v. *United States*, 266 U. S. 368, 371."

Union Power Company.

As has already been noted, the title of the Nottley dam site in the State of Georgia was held in the name of the Union Power Company, a Georgia company. The tribunals below allowed $18,907.02 as severance damages to this property. This company was a wholly owned subsidiary of Respondent (R. 34), and it was formed by Respondent as an agency to take care of that part of the development that extended into the state of Georgia. Respondent, of course, would have no right as a North Carolina corporation to condemn lands in Georgia, and the formation of a Georgia subsidiary was therefore necessary. On the very day that it was incorporated, June 11, 1926 (Comm. Tr. 212), at its first stockholders' meeting a resolution was passed adopting the Nottley site for hydroelectric development (R. 49). On the same day the directors met, approved the action of the stockholders, took steps to purchase the Nottley dam site, considered the offer of the owner to sell the dam site to the company, voted to accept it, and directed that the surveying and staking out of the land be begun (Comm. Tr. 216).

As a matter of fact Mr. Krickhan, Mr. Powelson's chief surveying engineer, who had been employed by Respondent and its predecessors since 1923 (Comm. Tr. 282), had begun exploratory surveying in the Nottley project more than two years before the Union Power Company was formed by Respondent (Comm. Tr. 1267). During this period Krickhan also secured options on various tracts in this reservoir (Comm. 1268). He later made complete surveys, setting hubs and stakes at various parallels (Comm. Tr. 1269).

On this point the Circuit Court of Appeals held (R. 1083):

> "A question arises with respect to the award of $18,907.02 as damages to the Nottley property. The title to this property was held by a subsidiary corporation of the power company, all of whose stock was owned by that company. The property moreover, is not situate within the state of North Carolina, where the property taken lies, but across the state line in Georgia. As to the location of the property, we do not think that the fact that it lies in another state precludes the award of damages with respect to it, where such damages result from the taking of land lying in the state of the forum. As heretofore stated, the Nottley land formed a part of the unitary enterprise for which the property of the power company had been acquired, and that company was entitled, upon the taking of a part of the property, to recover the total damage sustained from the taking, including the damage resulting to the remainder of the property not taken. The fact that a portion of the remainder might lie in another state ought not preclude a recovery necessary to adequate compensation. Cf. *Atchison & N. R. Co.* v. *Gough*, 29 Kan. 94; note 57 L. R. A. at 948."

It then proceeds as follows (R. 1084):

> "The fact that title is held by a subsidiary corporation, all of whose stock is owned by the power company, should not preclude recovery; for the damage falls upon the power company through depreciation in the value of the stock, just as clearly as if title were held by it. If the subsidiary corporation holding the title were made a party to the suit, therefore, it would be proper to award to the power com-

pany damages with respect to this property held for it as part of a unitary enterprise. The case presented would clearly be one where the court should look through form to substance and disregard the corporate entity of the holding corporation in the interest of subtantial justice, particularly since any damage to the Nottley lands would be mirrored in the depreciation in value of its stock held by the power company. *Taylor* v. *Standard Gas & Electric Co.*, 10 Cir. 96 F. 2d 693 at 706; *Centmont Corp.* v. *Morsch*, 1 Cir. 68 F. 2d 460; *New Colonial Ore Co.* v. *Helvering*, 292 U. S. 435; 54 S. Ct. 788; *Industrial Cotton Mills* v. *Com'r*, 4 Cir. 61 F. 2d 291; *Consolidated Indiana Coal Co.* v. *National Bituminous Coal Com.*, 7 Cir. 103 F. 2d 124. We cannot ignore, however, the fact that title to the lands is in the subsidiary corporation. *Cleveland Trust Co.* v. *Consolidated Gas, E. I. & P. Co.*, 4 Cir. 55 F. 2d 211; and before the respondent is permitted to receive the award made on account of these lands, that corporation should be made a party to this proceeding so that it will be bound by the judgment."

This requirement was met soon after the decision was handed down. It is submitted that the Circuit Court's treatment of this problem is entirely in accord with natural justice, and at the same time its propriety is sustained by well reasoned precedents. There can be no doubt from an examination of the voluminous record that the Union Power Company was to all intents and purposes a mere agency or instrumentality of Respondent and as such it was perfectly proper to award damages for injury to property, the title to which was in this subsidiary's name, but the true ownership of which was unquestionably in Respondent. There can be no doubt that if the Government were seeking to

charge Respondent for any misdeeds of the Union Power Company, it would be the first to insist that the corporate entity be ignored.

The doctrine that a subsidiary may be considered a mere instrumentality or agency of the parent company disregarding the corporate entity to avoid injustice is well established in our jurisprudence. *U. S.* v. *Reading Co.*, 253 U. S. 26 (1920); *New Colonial Ice Co.* v. *Helvering*, 292 U. S. 435 (1934); *Eichelberger* v. *Arlington Building*, 280 Fed. 997 (C. A. D. C. 1922); *Consolidated Indiana Coal Co.* v. *National B. Coal Comm.*, 103 F. 2d 124 (C. C. A. 7th 1939); *Industrial Cotton Mills Co.* v. *Commr. Internal Revenue*, 61 F. 2d 291 (C. C. A. 4th, 1932); *Centmont Corp.* v. *Marsch*, 68 Fed. 2d 460 (C. C. A. 1st 1933); *Taylor* v. *Standard Gas & Elec. Co.*, 96 F. 2d 693 (C. C. A. 10th 1938); *Kimberly Coal Co.* v. *Douglas*, 45 F. 2d 25 (C. C. A. 6th 1930).

The principle was well stated in an opinion by Mr. Justice Clarke in *United States* v. *Reading Co.*, 253 U. S. 26 (1920), *supra*, where he held (p. 62):

> "It results that it may confidently be stated that the law upon this subject now is, that while the ownership by a railroad company of shares of the capital stock of a mining company does not necessarily create an identity of corporate interest between the two such as to render it unlawful under the commodities clause for the railroad company to transport in interstate commerce the products of such mining company, yet *where such ownership of stock is resorted to, not for the purpose of participating in the affairs of the corporation in which it is held in a manner normal and usual with stockholders, but*

for the purpose of making it a mere agent, or instrumentality or department of another company, the courts will look through the forms to the realities of the relation between the companies as if the corporate agency did not exist and will deal with them as the justice of the case may require. United States v. *Lehigh Valley R. R. Co.*, 220 U. S. 257, 272, 273; *United States* v. *Delaware, Lackawanna & Western R. R. Co.*, 238 U. S. 516, 529; *Chicago, Milwaukee & St. Paul Ry. Co.* v. *Minneapolis Civic & Commerce Association*, 247 U. S. 490, 501."

The rule was well stated in *In re Watertown Paper Co.*, 169 F. 252 at 256 (C. C. A. 2d 1909):

> "(1) The legal fiction of distinct corporate existence will be disregarded, when necessary to circumvent fraud. (2) It may also be disregarded in a case where a corporation is so organized and controlled, and its affairs are so conducted, as to make it merely an instrumentality or adjunct of another corporation."

This language was quoted with approval in *Centmont Corporation* v. *Marsch*, 68 Fed. 2d, 460 at page 464 (C. C. A. 1st 1933) where the court further held:

> "It is unnecessary to add to the authorities in support of the rule that, where a subsidiary corporation is organized for a special purpose by a corporation which holds all its capital stock, and dominates and controls its affairs in carrying out its own business purposes, the subsidiary may be held to be a mere instrumentality for that purpose, and the court will disregard the corporate form and do justice between the corporation and third parties."

It is therefore submitted that the property located in the State of Georgia held by Union Power Company was properly considered by the courts below as being that of its owner, Respondent here.

In conclusion upon this point it is further submitted that since all of the property of Respondent and its subsidiary the Union Power Company was acquired and was held for a unitary enterprise, namely, an integrated hydroelectric development, and since the only use to which this property was put during all the time that it was held by Respondent and its subsidiaries, was in connection with that development (*i. e.* in surveys thereof, explorations thereof, engineering studies thereof, and staking out) the entire holding should be considered in law as one parcel of land, and accordingly, the award of severance damages for injuries to the land remaining after Petitioner's taking was entirely proper.

VII.

The award of interest was proper.

The methods used by the tribunals below to compute the interest to which Respondent is entitled were entirely consistent with the holdings that Respondent was deprived of a potential integrated hydroelectric power system. The system of calculation adopted is set forth at length in the judgment of the District Court (R. 1062, 1063, 1064, 1065). The fundamental basis for the method used was the holding that by the loss of the Powelson site, the entire value of the project was destroyed. The District Court said (R. 1063):

"By the first taking on January 28, 1936, the shoal and Powelson dam site was taken and the entire property of the Southern States Power Company was robbed of the value it possessed as the site of an integrated hydro-electric power system. After taking said 872.6 acres from the total holding of 12,287.94 acres of the respondent, in the Powelson development, the Southern States Power Company was left with 11,415.34 acres in the basin of the Powelson dam, which has been acquired by the subsequent takings above listed. After the taking of the Powelson dam site and shoal on January 28, 1936, the remaining 11,415.34 acres no longer possessed any value to the respondent for power purposes, and its value was limited to its adaptability for farming, timber growing, and similar purposes. In its then created status $10. an acre would have been a fair value for same."

The Circuit Court of Appeals held that this theory was "so manifestly correct as not to justify further discussion" (R. 1083), and that it had been correctly applied with respect to interest on the award made for the property taken and as to severance damages (R. 1083).

It is admitted by Petitioner (Pet. Br. 102) that the method used could be justified "on the theory that Respondent is entitled to compensation for his land which includes value for power purposes" (Pet. Br. 102). This is the very theory upon which the awards of interest by the three district judges were made and the very theory upon which their determination was affirmed.

Petitioner also takes the position (Pet. Br. 102, fn. 55) that since severance damages "ought not to have been awarded at all" it is unnecessary to consider the computa-

tion of interest on this item. It is obvious therefore that Petitioner makes no independent objection to the awards of interest, but in citing them as error is merely attacking again the fundamental holding that Respondent is entitled to the water power value of his holdings. It will, of course, serve no useful purpose here to reargue this basic proposition. It is set forth above in Point III.

The only fair method of computation is the one already adopted. It is the only method which will give Respondent the "just compensation" to which he is entitled. There is no principle of law more firmly established than that a landowner whose property is taken under the Government's power of eminent domain is entitled to the full equivalent of the value of the land paid contemporaneously with the taking. *Seaboard Air Line Railway Co.* v. *United States*, 261 U. S. 239 (1923); *Phelps* v. *United States*, 274 U. S. 341 (1927); *Jacobs* v. *United States*, 290 U. S. 13 (1933); *Brooks-Scanlon Corp.* v. *United States*, 265 U. S. 106 (1924).

"Just compensation" in this case can only be obtained therefore by the calculation of interest on the entire award from the time of the taking of the Powelson site.

The case of *Waterford Electric Light Heat and Power Co.* v. *State*, 208 App. Div. 273, 203 N. Y. S. 858 (Sup. Ct. App. Div. 3d Dept., 1924), *affirmed per curiam*, 239 N. Y. 629 (1925), is almost precisely similar on its facts and of real importance in the consideration of the interest problem. This was an eminent domain proceeding. Here the claimant owned a dam site on the Hudson River. The state by several separate takings condemned this land. The first appropriation took place in June 13, 1910; the last in June of 1913. The Court sustained

the claimant's contention and allowed interest on the entire award from the date of the first taking, holding (203 N. Y. S. 873):

> "The question of interest remains. The Court of Claims has found that the lands and flowage rights owned by claimant 'constituted one entire property, whose most beneficial and valuable use was its employment as a whole for the development of water power', and that 'its value depended upon its use as an entirety.' The state made 22 separate appropriations of parcels of land owned or controlled by the claimant. Three of these parcels were appropriated in the year 1910, and the remaining parcels were appropriated in the year 1913. Parcel No. 2318 consisted of .47 acres owned in fee by the claimant. This parcel is located on the easterly side of the river immediately above the easterly end of the dam which has been erected by the state. The date of its appropriation was June 13, 1910. Parcel No. 2402, consisting of 616 acres, was owned in fee by the claimant, and lies on the westerly side of the river. It is immediately above the westerly end of the dam which has been erected by the state. This parcel was appropriated on July 15, 1910. The ownership of these two parcels by the claimant made possible the erection of a dam and a development of a water power by the claimant. They were indispensable units in its proposed development. Therefore, when the state took these parcels, it deprived the claimant of its water power. We think that the claimant is entitled to interest from June 13, 1910, the earlier of the two dates, and the date of the appropriation of parcel No. 2318."

It is submitted therefore that the awards of interest should be affirmed.

VIII.

The Circuit Court of Appeals correctly conceived the scope of review under Section 25 of the Tennessee Valley Authority Act.

Petitioner has taken the position that the Circuit Court of Appeals has "conceived its function to be narrower than that directed by the plain language of Section 25" (Pet. Br. 103-5). The support for this contention is found, Petitioner says, in the fact that the Court, after modifying the award, held, "That in all other respects the judgment appealed from will be affirmed" (R. 1084).

Section 25 of the Tennessee Valley Authority Act * reads in part as follows:

> "• • • and the said circuit court of appeals shall upon the hearing on said appeal dispose of the same upon the record, without regard to the awards or findings theretofore made by the Commissioners or the district judges, and such circuit court of appeals shall thereupon fix the value of the said property sought to be condemned."

Reference to the opinion of the Circuit Court of Appeals on this point indicates that the Court clearly decided that under Section 25 it was *not* bound by the findings below (R. 1073, 1074):

> "The reasonable construction of the statute, we think, is merely that we are not to be bound by the findings of the trial court, but are to consider them in the light of the record, just as we consider simi-

* Section 25 of the Act of May 18, 1933, 48 Stat. 58, 70 (16 U. S. C. Sec. 831x).

lar findings in other appeals in which we have power to review the facts."

The cases cited by Petitioner (Br. 105) for the proposition that the Fifth Circuit "has experienced no difficulty in applying Section 25 literally" (Br. 104), when analyzed, do not place any different construction on this section than that which the Circuit Court of Appeals for the Fourth Circuit adopted below. Typical of the cases cited is *United States* v. *Bailey*, 115 F. 2d 433 (C. C. A. 5th, 1940). There the court held "that the sum awarded by the commissioners, which was the amount tendered by the Government, represents the true value of the property. We award the property owner $2,837.61." Certainly such an exact acceptance of the amount awarded by the commissioners to the very penny is not the "independent revaluation by the appellate court of the property condemned *free from any influence of the findings and award of the commissioners or the district court*", which Petitioner claims (Br. 104) that the statute contemplates.

In *United States* v. *Reynolds*, 115 F. 2d 294 (C. C. A. 5th, 1940) the court held that the award of the district judges was based upon a consideration of matters which were improperly in evidence. They held that the evidence received below would be sufficient for reversal, and ordinarily ground for a new trial. Knowing that the awards in the lower tribunals were not founded on competent evidence, the Circuit Court of Appeals could do nothing but make a new valuation since it could not give weight to the findings below. This is a far cry from establishing that the court would have completely ignored the considered judgments of the tribunals below if they had been based on proper evidence.

It is interesting to compare Petitioner's criticism of the circuit court in describing its action as an "*affirmance*" (Br. 104) with what the Fifth Circuit did in the *Stephenson Brick Company* v. *United States*, 110 F. (2d) 360 (C. C. A. 5th, 1940) (which Petitioner cites as applying Section 25 literally). There, as here, the court was reviewing an award in condemnation proceedings under the TVA Act. The three district court judges had awarded $97,500 to the landowner. The court said (110 F. (2d) 361):

> "*Upon considering the record* and the argument we find that the land taken is a part of a larger tract which at the time of the taking was used as a unit for a brick manufacturing plant and that the severance of the part taken did destroy the usefulness and value of the plant * * *. We do agree that the total compensation fixed by the three district judges is fair * * *."

The judgment was ordered in the same sum as found by the three district judges—to wit, $97,500, and the judgment below is noted in the report as "affirmed".

In *Welch* v. *Tennessee Valley Authority*, 108 F. (2d) 95 (C. C. A. 6th, 1939) *cert. den.* 309 U. S. 688 (1940), the court discussed at some length the scope of appellate review under Section 25 (108 F. 2d 99):

> "As we view the provisions of the applicable statute, these appeals are equitable in nature and the questions presented are of fact only, depending upon the weight given to the oral testimony and the commissioners' findings and the lower court's conclusion thereon must be accepted here unless the evidence decidedly preponderates against it."

There, just as in the instant case, it had been urged that because of provisions peculiar to the statutes under these proceedings, the burden rested on the Circuit Court of Appeals to weigh the evidence as though sitting as a trial court. The court refused to adopt this position, on the ground that it had no opportunity to judge, by a mere reading of the printed record, the interest, intentions, credibility, or source of knowledge of the witnesses. And, we submit, rightly so, inasmuch as a contrary decision would render completely valueless the more lengthy and exhaustive work of the lower tribunal.

The court's language on this point is significant (108 F. (2d) 101):

> "The court, when sitting without a jury, may take into consideration the witnesses' sources of knowledge, their interest, good intentions, their seeming honesty, their respective opportunities for personal knowledge of the facts about which they testify and their conduct and manner on the witness stand. All of these things may be considered in determining the weight which should be given to a statement, some of which may be so adverse to the testimony of the witness as to justify a trial court in ignoring it. It follows that this Court, not having the opportunity to observe the witnesses and there being absent in the printed record the essentials for a judicial weighing of their testimony on appeal, will not reject the findings of the lower court unless it is apparent it has misapprehended the evidence or gone against its clear weight."

The court concluded (108 F. 2d 102):

> "The triers of the facts who saw and heard the witnesses were the best judge of the value, weight

and credibility of their testimony and could best weigh the evidence.

"* * * we are of the opinion the decrees of the lower court should be affirmed."

It is submitted, therefore, that the interpretation placed on Section 25 by the Court below was reasonable and logical and that it would be unreasonable to suppose that Congress intended to impose a mandatory requirement that the appellate court should shut its eyes to all prior proceedings or that the statute necessitates consideration of the printed evidence completely divorced from the prior proceedings in the case.

Conclusion.

It is respectfully submitted that the judgment of the United States Circuit Court of Appeals for the Fourth Circuit should be affirmed.

Respectfully submitted,

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March , 1942.